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(54) Title: PROTECTIVE COVER, ESPECIALLY FOR THE HYGIENIC SEALING OF CONTAINERS CONTAINING DRINKS

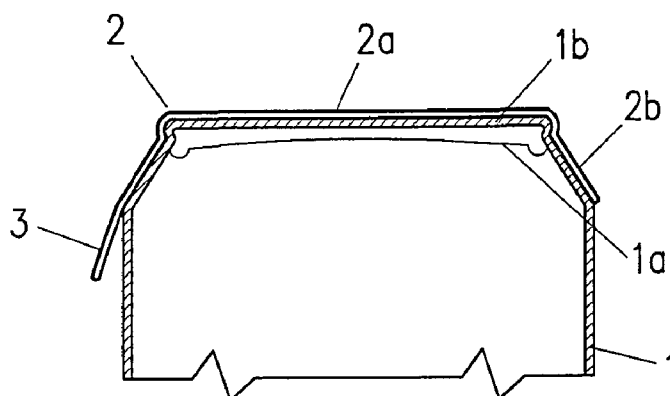


Fig. 1b

(57) Abstract: The invention relates to a protective cover, favourably for the hygienic sealing of containers of circular cross-section, which protective cover has a sealing surface (2a) and a fixing part (2b) joined to its material continuously. The protective cover (2) is a thin flexible foil, and the sealing surface (2a) of the protective cover (2) is of the same size as the top (1a) of the container (1), and the fixing part (2b) of the protective cover (2) extends over the edge (1b) of the container (1) and closely fits to the side of the container (1).



Protective cover, especially for the hygienic sealing of containers containing drinks

The utility model relates to a protective cover, especially for the hygienic sealing of containers of circular cross-section.

Widely available canned drinks, such as beers, soft drinks, energy drinks etc., are extremely popular due to their packaging. They are easy to handle, can be opened by a single movement, and they can be disposed of after consuming their content. By now they can also be collected selectively and recycled. Their only disadvantage is that it is not quite hygienic to drink from them, as there is nothing to protect the opening used for drinking from contaminations. Following production, during storage and transportation the cans are protected due to their collective packaging, but after it is removed, they are not covered any longer while they are placed on the shelves and sold, so they are continuously exposed to contamination. When consumers decide to drink out of the cans, they must clean the part of the cans contacted with the lips using the edge of their clothes or their hands – which may not be appropriately clean either – or other tools (e.g. tissues).

The packaging of certain food products, especially dairy products (e.g. sour cream) contains a protective cover, generally made of transparent plastic, which can be taken off the container and placed back there. However, such protective covers are not placed on the containers for purposes of hygiene, but in order to make it possible to close the container again, if its content is not used up completely, to stop it from getting spilled or from coming into direct contact with air, because then it easily oxidises and deteriorates more quickly.

Numerous solutions are known for sealing drink containers. The most widely used solutions include thermos bottles or flasks which have a cap that can be fixed above the cork or other sealing structure (P0000560), most often it can be screwed on (P0402355), and generally this top also functions as a drinking glass. In these cases again, protection against contamination is not the primary aim either, although these are undoubtedly hygienic solutions. Their

disadvantage is that the cap or glass providing hygienic protection can be removed from the container completely, so it is not an organic part of the vessel, so it can get dropped, lost or contaminated.

The screw-cap of the jars or vials of certain medicines, pharmaceutical preparations or dragée-type food products is often coated with a thin safety foil that can be torn off by a single movement in order to be able to certify the intactness of the container. It functions on the basis of the same principle as the protective cover of the present utility model, but generally the top of the caps is not completely covered, the safety foil is applied only around the skirt of such caps.

Utility model no U1000126 describes an ice-cream dosing jar which is covered with protective foil having a pull tab. Although this construction is similar to our solution, the foil is fixed to the cap of the jar only around its diameter, exclusively for the purpose of covering the jar, i.e. keeping its content inside. In this case again the set task is completely different than in the case of our model.

Our aim with the utility model was to make the consumption of popular canned beers, soft drinks, etc. more hygienic, ensure easy removal of the protective cover with a single movement, make it possible to fix it on the cans in a simple way during production, and ensure cheap production, i.e. make sure that the practical construction does not increase either the production costs or the consumer price.

The solution according to the model is based on the recognition that if a thin foil is placed on top of the drink can, which completely covers the opening – which is made suitable for drinking after opening the can – and its environment along the diameter of the upper edge of the container, then the set task can be solved.

In accordance with the set aim the protective cover according to the model, favourably for the hygienic sealing of containers of circular cross-section – which protective cover has a sealing surface and a fixing part joined to its material continuously – is constructed in such a way that the protective cover is a thin flexible foil, and the sealing surface of the protective cover is of the same size as the top of the container, and the fixing part of the protective cover extends over the edge of the container and closely fits to the side of the container.

A further feature of the utility model is that the sealing surface of the protective cover has an adhesive layer at least on the part near the top of the container, ending at the edge of the container. The protective cover is an adhesive foil known in itself.

In the case of a possible embodiment, an opening tab is made from the protective cover's own material.

In the case of a practical embodiment of the utility model an opening aid, e.g. an opening cord made of a different material is also connected to the protective cover.

According to a further favourable embodiment on the two sides of the opening tab or opening aid there are perforations to facilitate opening.

The main advantage of the protective cover according to the utility model is that its production is simple, and it can be manufactured from a cheap and environmentally friendly material. The thin flexible foil does not prevent the storage of the drink cans on top of each other, and it does not affect their usual, well-known external appearance either.

Below the utility model is described in more detail on the basis of the construction example shown in the figures attached. In the drawings

- figure 1a shows the view of a drink container with a protective cover having an opening tab,
- figure 1b shows cross-section A – A of the drink container indicated in figure 1a and enlarged,
- figure 2 shows a drink container with a protective cover having an opening cord,
- figure 3 shows a drink container with a protective cover having perforations.

Figure 1a shows that the protective cover 2 made of thin flexible foil is stretched on the top 1a of the container 1 almost invisibly. The protective cover 2 is applied on the top 1a of the container 1 in a known way, e.g. with heat treatment. The protective cover 2 fits to the container 1 perfectly, practically it adheres to it so that it can be opened easily. Adhesion between the two contacting surfaces is achieved either by using adhesive foil or, in a given case, by applying an adhesive layer t only on the internal surface of the part of the protective

cover 2 in contact with the edge 1b of the container 1. The protective cover 2 may be made of transparent plastic, aluminium foil, shrink-film or even cellophane or paper.

It can be seen that the sealing surface 2a of the protective cover 2 is of the same size as the top 1a of the container 1, and it is fitted onto its edge 1b. The protective cover 2 extends over the edge 1b of the container, and the fixing part 2b closely fits to the side of the container 1.

On the side of the protective cover 2, created from its own material, there is an opening tab 3. When opening the container 1, the protective cover 2 can be simply removed from the container 1 with the help of the opening tab 3.

The cross-section shown in figure 1b illustrates that the sealing surface 2a of the protective cover 2 fits to the top 1a of the container 1 and is practically of the same size. The fixing part 2b of the protective cover 2 is larger than the size of the top 1a of the container 1, extends over its edge 1b, and closely fits to the side of the container 1. It can also be seen that the opening tab 3 is constructed as an extension of the fixing part 2b of the protective cover 2, from its own material.

Figure 2 shows a version of the container 1 with a protective cover 2, when the aid facilitating opening, for example an opening aid 4 is integrated in the opening tab 3. In the case of the embodiment shown in the drawing the opening aid 4 is an opening cord generally used on cigarette packets or tea boxes. So the opening cord is fitted to the protective cover 2 so that it may be removed from it with a single movement when the container 1 is opened.

In figure 3 a possible version of the protective cover 2 can be seen where there are perforations, for example, on the two sides of the opening tab 3 to facilitate opening. This enables even easier opening.

Obviously, perforation can also be used in order to facilitate easier opening of the opening aid 4 shown in the previous figure.

In the case of each embodiment the protective cover overhangs to such an extent as to make sure that at least the part suitable for drinking and coming into contact with the lips is covered before the container 1 is opened.

The protective cover is described on the basis of the drawings, on a disposable beer can, but obviously the utility model is not limited only to this single embodiment, but it may be realised in several ways within the scope of protection defined by the claims.

The protective cover according to the model may be favourably used for the hygienic covering of disposable cans, flasks and other containers containing different food products, especially drinks. It may be a further advantage during its use that in a given case it can also function as an advertising vehicle.

Claims

1. Protective cover, favourably for the hygienic sealing of containers of circular cross-section, which protective cover has a sealing surface (2a) and a fixing part (2b) joined to its material continuously, **characterised by** that the protective cover (2) is a thin flexible foil, and the sealing surface (2a) of the protective cover (2) is of the same size as the top (1a) of the container (1), and the fixing part (2b) of the protective cover (2) extends over the edge (1b) of the container (1) and closely fits to the side of the container (1).
2. Protective cover as in claim 1, **characterised by** that the sealing surface (2a) of the protective cover has an adhesive layer (t) at least on the part near the top (1a) of the container (1), ending at the edge (1b) of the container (1).
3. Protective cover as in claim 1, **characterised by** that the protective cover (2) is adhesive foil known in itself.
4. Protective cover as in any of claims 1-3, **characterised by** that an opening tab (3) is made from the protective cover's (2) own material.
5. Protective cover as in any of claims 1-3, **characterised by** that an opening aid (4), e.g. an opening cord made of a different material, is connected to the protective cover.
6. Protective cover as in any of claims 4-5, **characterised by** that on the two sides of the opening tab (3) or opening aid (4) there are perforations to facilitate opening.

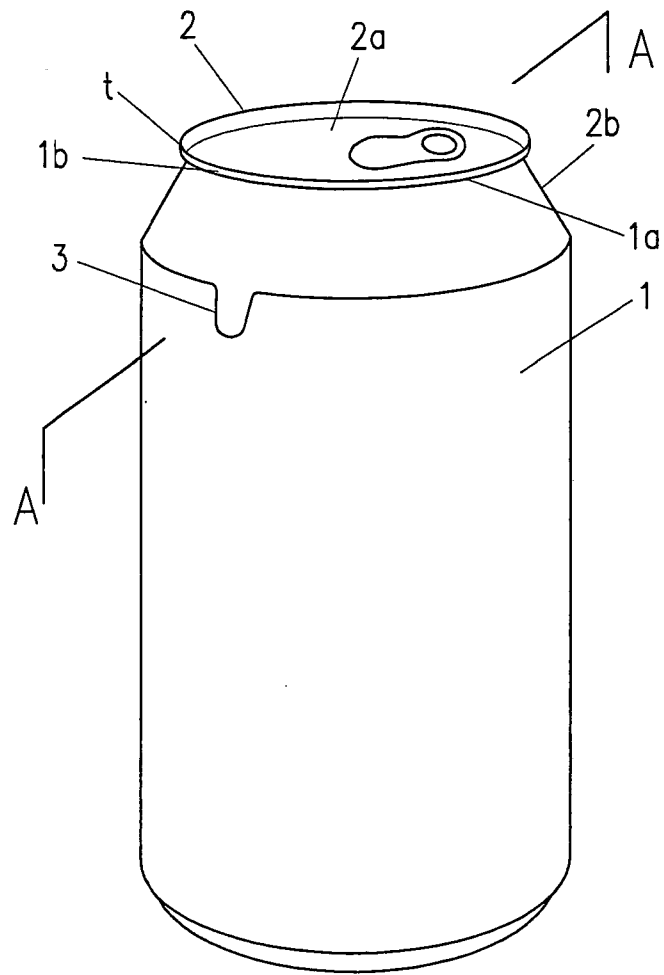


Fig. 1a

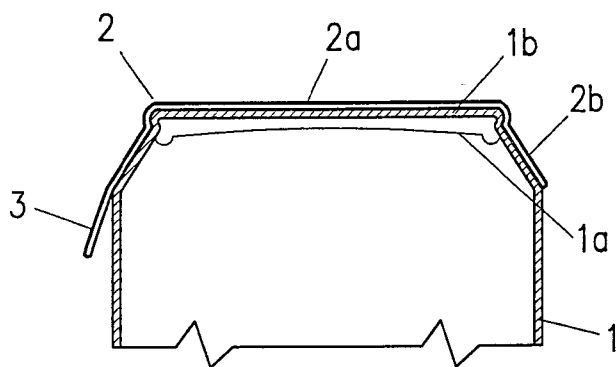


Fig. 1b

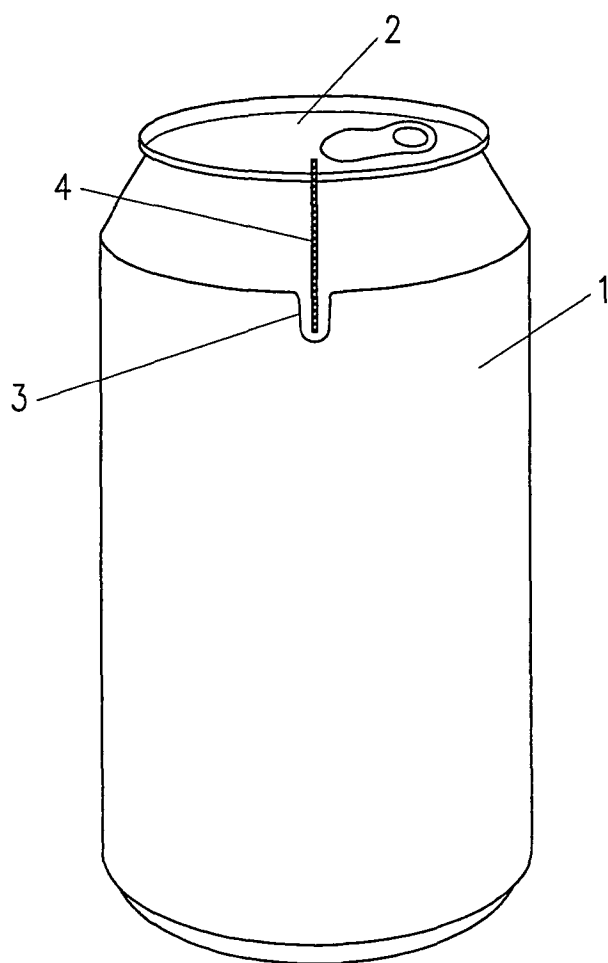


Fig. 2

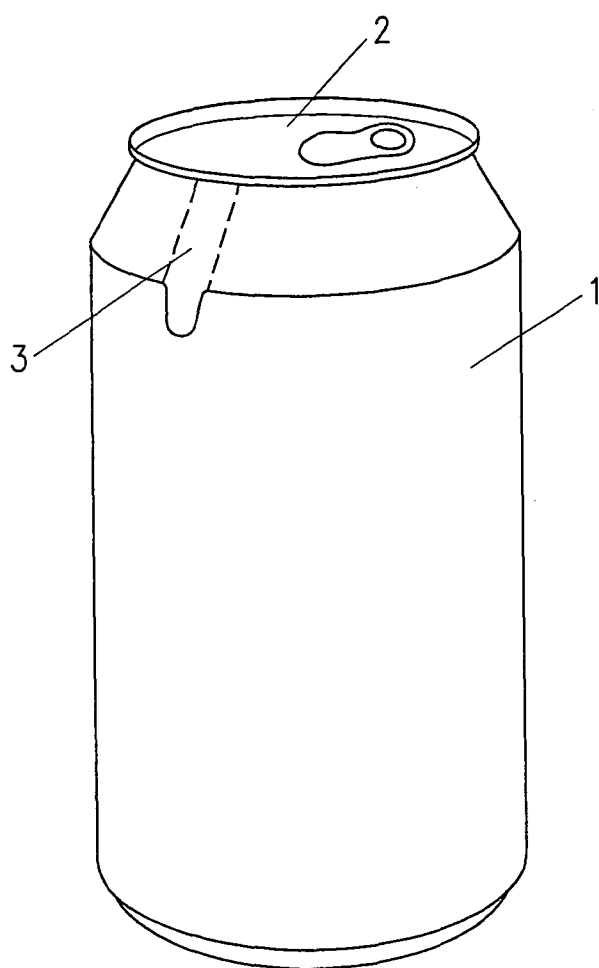


Fig. 3