



(1) Publication number:

0 549 965 A1

## (2) EUROPEAN PATENT APPLICATION

(21) Application number: **92121453.2** 

(51) Int. Cl.<sup>5</sup>: **B65D** 77/20, B65B 7/28

② Date of filing: 17.12.92

Priority: 24.12.91 IT PD910236

43 Date of publication of application: 07.07.93 Bulletin 93/27

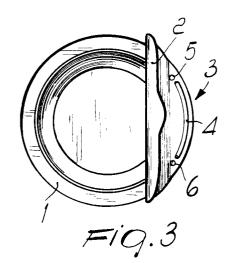
Designated Contracting States:
AT BE CH DE DK ES FR GB GR LI LU MC NL
PT SE

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- © Container with peel-off lid having improved anchorage region.
- The container (1) has a peel-off lid (2) heat-welded thereto. The weld includes an anchorage region (3), whereby the container (1) can be opened by peeling back the lid (2) and the lid (2) remains attached to the container (1) at the anchorage region (3). The anchorage region (3) includes an arcuate portion (4) having a spot-weld (5,6) at each end.



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The present invention relates to a container with a heat-welded peel-off lid having an improved anchorage region.

As is known, there are containers which usually have a heat-welded peel-off lid which allows a rapid and easy opening.

The greatest problem that they have is related to the recycling of the container and the lid.

Furthermore, since the use of this type of container is becoming widespread, especially for the replacement of containers which have higher manufacturing and recycling costs, it is necessary to overcome the problem of the disposal of the lid, which sometimes is not kept and stored together with the container after use but is discarded wherever the user is at the time.

The aim of the present invention is to eliminate or substantially reduce the problems described above by providing a container which allows to keep the lid associated with the container.

Within the scope of the above aim, an object of the present invention is to provide a container which improves the use of the container itself.

This aim, this object and others which will become apparent hereinafter are achieved by a container with heat-welded peel-off lid with region having improved anchoring, characterized in that the heat-weld of the lid onto the container has at least one preset portion which provides high degree of resistance to mutual separation.

Further characteristics and advantages of the invention will become apparent from the description of some preferred but not exclusive embodiments of a container according to the invention, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

figure 1 is a perspective view of a container according to the invention in an open condition;

figure 2 is a plan view of the container in a closed condition;

figure 3 is a plan view of the container in an open condition;

figure 4 is a plan view of a heat-welding head; and

figure 5 is a front elevation view of the head.

With reference to figures 1 to 3, the present invention comprises a container 1 with a heat-welded peel-off lid 2.

The heat-weld of the lid 2 on the container 1 has at least one preset portion or anchorage region, designated by the reference numeral 3 in the above described figures, which provides a high degree of resistance to mutual separation.

The preset portion 3 comprises an arcuate portion 4 and at least two spot-welds 5 and 6 produced at the ends of the arcuate portion 4; said spot-welds cooperate, whereby to resist separation of the lid 2 from the container 1, obtaining at the

same time, as shown in figures 1 and 3, the possibility of easily extracting any product contained therein

Depending on the products which can be packaged with the container according to the invention, the portion 3 can be delimited even just by the spot-welds 5 and 6 or just by the arcuate portion 4.

A heat-welding head, designated by the reference numeral 7, comprises at least one raised portion, designated by the reference numeral 8, which allows to heat-weld the lid 2 onto the container 1, which features the portion 3 with high resistance to mutual separation.

The raised portion 8 comprises an arcuate portion 9 at the end of which protrusions 10 and 11 are formed, in order to define the complementarily shaped arcuate portion 4 of high-resistance weld and the spot-welds 5 and 6, as previously described.

In order to obtain the above described alternative embodiments, the head 7 may alternatively be provided with only the arcuate raised portion 9 or only the protrusions 10 and 11, in order to provide the complementarily shaped portion 3 with high degree of resistance to the separation of the container 1 from the lid 2.

Advantageously, the container according to the invention can be recycled together with its respective lid.

Furthermore, the container can accommodate any product, replacing packages which are more expensive or more difficult to recycle.

The resistance afforded by the spot-welds and/or arcuate portion to the separation of the lid from the container severely limits the possibility of disposing of the lid separately from the container, if the products packaged in said container are fresh or perishable products, such as yogurts, dairy creams, confectionery products and the like.

Practical tests have shown that the container achieves the intended aim and object, eliminating the possibility of mutual separation of the lid and the container and advantageously constituting a container which can be recycled together with its respective lid.

The container according to the present invention is susceptible to numerous modifications and variations, all of which are within the scope of the inventive concept. All the details may furthermore be replaced with other technically equivalent elements.

In practice, the materials employed, as well as the dimensions, may be any according to the requirements.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims

and accordingly such reference signs do not have any limiting effect on the scope of each element identified by way of example by such reference signs.

Claims

 Container with heat-welded peel-off lid with improved anchorage region, characterized in that the heat-weld of the lid onto the container has at least one preset portion which has a

high degree of resistance to mutual separation.

2. Container according to claim 1, characterized in that said at least one portion comprises at least one spot-weld, whereby to resist separation of the lid from the container.

3. Container according to claim 1, characterized in that said at least one portion comprises an arcuate weld portion, whereby to resist the separation of the lid from the container.

4. Container according to claim 1, characterized in that said at least one portion comprises an arcuate portion at the ends of which spot-welds are produced, said spot-welds being such that, in mutual cooperation, they resist separation of the lid from the container.

5. Head for heat-welding the peel-off lid to the container of claims 1-4, characterized in that it comprises at least one raised portion for providing a heat-weld of said lid onto said container, including an anchorage region having a high degree of resistance to mutual separation.

6. Head according to claim 5, characterized in that said raised portion comprises at least one protrusion for forming at least one spot-weld with high degree of resistance to the separation of said lid from said container.

7. Head according to claim 5, characterized in that said raised portion comprises an arcuate portion for forming a weld with an anchorage region having a high degree of resistance to the separation of said lid from said container.

**8.** Head according to claims 5, 6 and 7, characterized in that said raised portion comprises an arcuate portion associated with protrusions which protrude adjacent to its ends.

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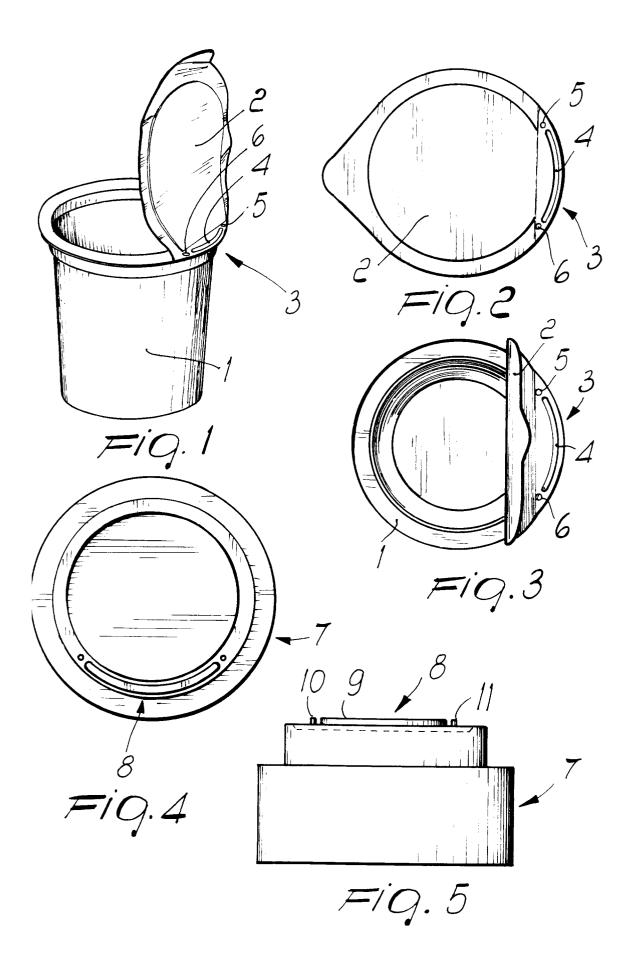
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## **EUROPEAN SEARCH REPORT**

EP 92 12 1453

Category	Citation of document with in of relevant pas	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Х	FR-A-2 132 581 (ONO * page 4, line 3 -	)	1,3	B65D77/20 B65B7/28
X	EP-A-0 299 571 (HSM) * column 4, line 13	 ) - line 25; figure 5	* 1,3	
A,P	DE-U-9 114 409 (JAGI * page 9, line 15 -	ENBERG) line 26; figure 8 *	1	
A	CH-A-677 473 (SCHWE: AG.)	IZERISCHE ALUMINIUM		
A	EP-A-O 406 515 (ALUM AMERICA)	MINIUM COMPANY OF	1,5	
A	EP-A-0 379 136 (SCH	MALBACH - LUBECA)		
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
				B65D
				B65B
	The present search report has be	en drawn up for all claims		
		Date of completion of the search		Examiner
		23 APRIL 1993		ZANGHI A.
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O: non	-written disclosure rmediate document		he same patent fami	