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(54) **A beverage packaging apparatus and a beverage packaging method**

(57) There is provided a bottle beverage packaging apparatus and method in which an open topped bottle 20 having a primary chamber charged with beverage 21 containing gas in solution is enclosed together with a closure 8 in a pressure chamber 25 which may be formed against a shoulder of the bottle. The chamber 25 is pressurised with nitrogen gas to pressurise the primary chamber and a secondary chamber 14 in the closure 8 through an aperture 15 of the chamber 14 prior to the closure 8 being displaced by a closure locator 5 to seal the open top of the bottle in the pressurised chamber 25. A projection 11A from the secondary chamber 14 extends into the beverage 20 to locate the aperture 15 beneath the surface thereof. Following sealing of the bottle the chamber 25 is de-pressurised and opened for removal of the sealed package. The chamber 25 may be formed by a tubular shroud 2 carried by a rotating carousel. The secondary chamber 14 may be formed in a hollow insert separate from the closure 8. There is also provided a beverage package in which the closure which may be fitted by the apparatus and system includes a manually openable vent that reduces a headspace pressure in the sealed package to atmospheric pressure for gas to be injected into the beverage through the aperture 15 for froth development prior to removal of the closure from the bottle.

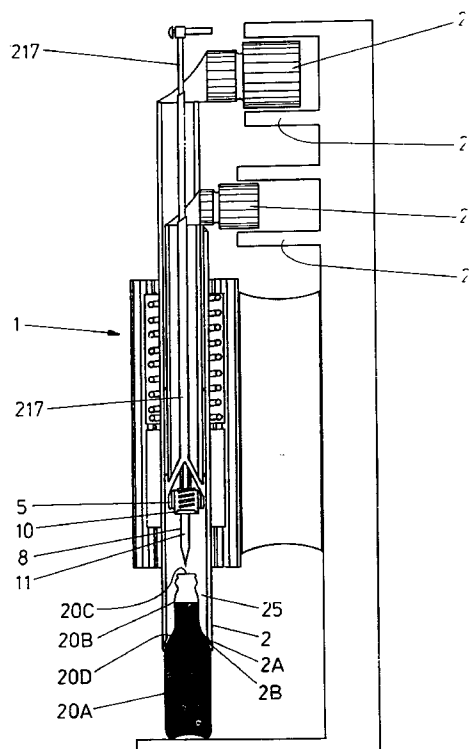


FIG. 15

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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 6181

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.6)
D,A	GB-A-1 266 351 (ARTHUR GUINNESS SON & COMPANY (DUBLIN) LIMITED) * page 2, line 126 - page 3, line 26; figures 1,2 *	1,29,44	B67B3/00 B67B3/02 B65D79/00
D,A	GB-A-2 256 628 (GUINNESS BREWING WORLDWIDE LIMITED) * page 7, line 27 - page 8, line 4; figure 1 *	1,29	
A	GB-A-1 027 597 (OWENS-ILLINOIS, W.C.) * page 8, line 87 - page 9, line 2; figure 1 *	1,29	
A	GB-A-740 480 (VIVIAN ET AL.) * page 5, line 47 - line 62; figures 5,6 *	1,29	
A	WO-A-94 16966 (CPB INNOVATIVE TECHNOLOGY LIMITED) 4 August 1994 * figures 14-17 *	44	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B67B B65D B67C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 July 1996	Examiner Martínez Navarro, A.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet -B-

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1st invention. Claims 1 to 43: Apparatus and method for packaging a beverage in a bottle having a primary and a secondary chamber.

2nd invention. Claims 44 to 47: Beverage package.

GB-A-1 266 351 is considered as the closest prior art, from which independent claims 1, 29 and 44 differ in the following:

Claim 1.- The packaging apparatus includes a closure locator, a gas pressure control means and a pressure chamber having sealing means operable therewith.

Claim 29.- The packaging method also makes use of a closure locator, of a gas pressure control means and of a pressure chamber having sealing means operable therewith.

Claim 44.- The cap sealant is moulded to present a part thereof with which the hollow insert carried by the cap mechanically engages.

Only claims 1 and 29 share technical features which define a contribution made over the prior art. Therefore there is not unity of invention according to Rule 30 EPC. Only claims 1 to 43 have been searched.