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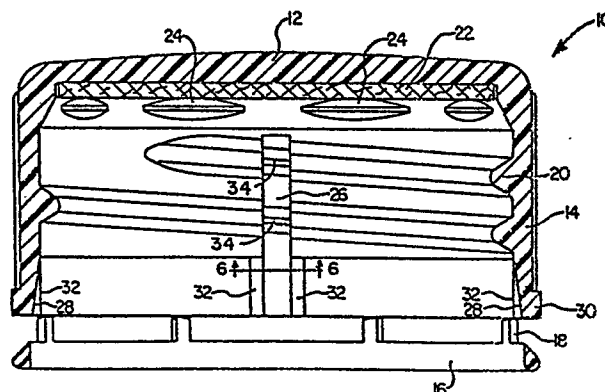
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54 **Tamper-indicating closure.**

57 A thermoplastic closure (10) for fitment to a container for packaging a product capable of producing internal container pressure, e.g., a carbonated beverage, is disclosed. The closure (10) comprises a top wall (12) and an annular sidewall (14). A closure thread (20) is provided on the inside surface of the sidewall (14) and is preferably extended to require the user to make two turning motions to achieve removal. Thread (20) cooperates with the container neck thread (42) to achieve fitment of the closure (10) to the container neck (40). A sealing system (22) adjacent the top wall of the closure provides sealing of the closure to the container. One or more gas venting grooves (26) are provided on the closure for venting of pressurized gas from the container upon loss of the seal when the closure is rotated to remove it from the container. In order to strengthen the closure (10) where it is crossed by the groove(s) (26), a rigidifying structure (34) is provided at each point of traverse by the vent groove(s) (26) of the closure thread (20). The height of the rigidifying structure (34) is less than that of the thread (20). Stand-off protuberances (32) are preferably provided about the lower inside surface (28) of sidewall (14). A heatshrinkable tamper-indicating means (16) is attached to the lowermost edge of the sidewall of the closure (10). Application of heat to the tamper-indicating means (16) causes it to shrink towards the container and to a point of interference with a container flange (48).

The combination of tamper-indication means (16) and venting structure (26) enables a closure to be formed with tamperproof properties and compatible resistance to premature release from a pressurized container.





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. 4)
A	US-A-4 206 852 (DUNN) * Column 3, lines 23-31, 39-44; column 4, lines 8-12; column 6, lines 18-33; figures 2-4 *	1, 4-6, 9, 10	B 65 D 41/34 B 65 D 51/16
A	--- EP-A-0 009 854 (METAL CLOSURES) * Page 4, lines 5-25; figures 5, 6 *	1	
A, D	--- GB-A-2 062 593 (ETHYL PRODUCTS) * Claims 1-6; figures 3-6 *	1, 7-9	
A	--- US-A-3 612 325 (WILLIAMS) * Figures 1, 2 *	1, 7	
A	--- FR-A-2 439 138 (VAN LEER) * Page 4, lines 20-23; figure 1 *	1, 4, 5	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
	-----		B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26-06-1985	Examiner BESSY M. J. F. M. G.
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	

