

Title (en)  
Stopper for a container

Title (de)  
Stopfen für einen Behälter

Title (fr)  
Bouchon pour un récipient

Publication  
**EP 0798228 A1 19971001 (DE)**

Application  
**EP 97105236 A 19970327**

Priority  
CH 81196 A 19960328

Abstract (en)  
A stopper for a container, e.g. a small tube or a bottle, comprising (a) a chamber (1) which may be empty or filled with active material(s) (2), e.g. drying agents such as silica gel, active carbon, perfume, or a preservative such as naphthalene, and with an upper edge in the form of a cover part (7) on the other side of the centre line of the stopper and adapted to the shape of chamber (1), preferably a ring-shaped element with a rectangular, square, circular, oval or elliptical cross-section, (b) a sealing or retaining system (3), and optionally (c) a guarantee strip (4) with retainer (5) in the downwards extension (18) of element (7), and/or (d) a compression spring system (6) in the lower part of the stopper and in the downward extension of the side wall (8) of chamber (1). Novel features are that; (i) the lateral outer wall (8a) of chamber (1) forms the sealing/retaining system (3), (ii) the boundary between the inner wall (8b) of chamber (1) and the top (7a) of element (7) is designed in such a way that it can be combined with a sealing element (10) matching the size and shape of chamber (1) so that (1) can be sealed from above, either (iii) the lower part of side wall (8) is in the form of a retaining edge (11) facing the centre line which prevents an element (12) inserted into the chamber from above passing this zone and (iv) element (12) consists of a material which retains the active substance (2) in chamber (1) but does not inhibit its action on the other side of (12), or (v) chamber (1) has a base (13) with perforations (14) of the size required to produce the same result as in (iv), and (vi) the space (15) between the side wall (8a) of (1) and the cover part (7) with optional strip (4)/(5) is designed so as to accept and fix the top of the container inserted into this space. Also claimed is a process for the production of this stopper.

Abstract (de)  
Der erfindungsgemässe Stopfen für einen Behälter umfasst eine Kammer (1), welche leer bleiben kann oder welche wenigstens ein aktives Mittel (2) aufnehmen kann, und ein Dichtungs- und/oder Rückhaltesystem (3), sowie gegebenenfalls, ein Garantieband (4) mit Rückhaltevorrichtung (5) und/oder, ein Druckfedersystem (6), wobei die genannte Kammer (1) oben durch ein Verschlusselement (10) verschliessbar ist und unten einen Boden (13) aufweist mit Öffnungen (14) zum Entfalten aktiver Mittel (2). Die Rückhaltevorrichtung ist aus zwei miteinander in trennbarer Form verbundenen Teilen gefertigt. <IMAGE>

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Citation (search report)  
• [DYA] FR 1090874 A 19550405  
• [DY] DE 9203763 U1 19920521  
• [A] FR 1533983 A 19680726 - GEIGY LAB  
• [A] FR 1213774 A 19600404 - TRAVAIL MECANIQUE DU VERRE SOC  
• [A] FR 74630 E 19601226 - TRAVAIL MECANIQUE DU VERRE SOC  
• [A] FR 2276238 A1 19760123 - BOUCHAGE MECANIQUE [FR]

Cited by  
US9457349B2; CN103167992A; EP0974529A1; GB2422813A; EP4001141A1; CN114476354A; US2022153484A1; WO2007082696A1; WO2010108450A1

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