

Title (en)  
SELF-OPENING CLOSURE FOR COMPOSITE PACKAGINGS OR FOR CONTAINER CONNECTION PIECES CLOSED BY A FILM MATERIAL

Title (de)  
SELBSTÖFFNER-VERSCHLUSS FÜR VERBUNDPACKUNGEN ODER FÜR MIT FOLIENMATERIAL VERSCHLOSSENE BEHÄLTERSTUTZEN

Title (fr)  
SYSTEME DE FERMETURE A OUVERTURE AUTOMATIQUE POUR EMBALLAGES COMPOSITES OU POUR EMBOUTS DE RECIPIENT  
OBTURES PAR UNE PELLICULE

Publication  
**EP 1509456 B1 20060628 (DE)**

Application  
**EP 03718593 A 20030522**

Priority  
• CH 0300328 W 20030522  
• CH 9172002 A 20020531

Abstract (en)  
[origin: WO03101843A1] The invention relates to a self-opening closure consisting of a connection piece (2) having a projecting lower edge (9) which is to be welded or glued onto a composite packaging, an associated rotating cap (1), and a self-opening sleeve (3) which is arranged inside the connection piece (2) and can be rotated by the rotating cap (1). The inner side of the connection piece (2) is provided with four guiding sections which are arranged in a distributed manner on the inner circumference thereof and have a changing incline. Said sections co-operate with specially formed guiding ribs on the outer wall of the self-opening sleeve (3), causing said self-opening sleeve (3) to carry out a discontinuous downwards movement while continuously rotating inside the connection piece (2), guided along said guiding sections, the downwards movement overriding the rotational movement. In this way, the self-opening sleeve (3) pierces the paper or cardboard laminate with the tip (24) of its piercing pin, first in a steep helical downward movement, and then carries out a horizontal rotational movement about 340 DEG , during which it cuts a round disk out of the laminate with its sharp cutting edge of the piercing pin, said round disk then pivoting downwards and stopping in this position.

IPC 8 full level  
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CPC (source: EP KR US)  
**B65D 5/74** (2013.01 - KR); **B65D 5/748** (2013.01 - EP US)

Cited by  
EP3943408A1; WO2022017662A1; CN113968415A; WO2014001507A1; US9738427B2; US10676261B2; US11718457B2; EP2287082A1; WO2011020634A1; EP2368808A2; US8672167B2; US9487324B2; US10384825B2; DE102007057863A1

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**WO 03101843 A1 20031211**; AU 2003222713 A1 20031219; BR 0311396 A 20050315; BR 0311396 B1 20120612; CA 2485300 A1 20031211; CA 2485300 C 20110412; CN 100431928 C 20081112; CN 1655991 A 20050817; DE 50304066 D1 20060810; EP 1509456 A1 20050302; EP 1509456 B1 20060628; ES 2270005 T3 20070401; KR 101027209 B1 20110406; KR 20040106581 A 20041217; MX PA04011678 A 20050705; RU 2004132851 A 20050910; RU 2314238 C2 20080110; US 2005242113 A1 20051103; US 7207465 B2 20070424

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