

Title (en)
EXPANSION BOTTLE PLUG

Title (de)
AUSWEITBARER STOPFEN

Title (fr)
BOUCHON DE BOUTEILLE DILATABLE

Publication
EP 1334040 A4 20060913 (EN)

Application
EP 00975286 A 20001031

Priority
US 0028866 W 20001031

Abstract (en)
[origin: WO0236450A1] The bottle plug (1) includes a bottle plug member (2) an elastomer member (3). The bottle plug member (2) consists of a gas-tight means and a reuse-proof means and further inserts into the elastomer member (3) being assembled as a unit to form the bottle plug. When the bottle plug is inserted into a bottle neck (4), the gas-tight means provides an expansion portion to seal the bottle neck and the reuse-proof means provides an appearance and the function of indication whether the bottle neck has previously opened or the bottle plug has been used.

IPC 1-7
B65D 39/12

IPC 8 full level
B65D 39/12 (2006.01); **B65D 51/16** (2006.01); **B65D 55/02** (2006.01)

IPC 8 main group level
B65D (2006.01)

CPC (source: EP)
B65D 39/12 (2013.01); **B65D 51/1616** (2013.01); **B65D 55/02** (2013.01)

Citation (search report)

- [X] DE 1914314 A1 19691009 - GIRAUD POVOST & CIE ETS
- [X] DE 1157101 B 19631107 - HEINRICH ROLAND HUCKE
- [XY] DE 7410788 U 19750424 - ANGELO GUALA DI PIERCIACOMO E [IT]
- [XY] US 2718974 A 19550927 - HUGO HELBIG
- [XY] GB 189622132 A 18970807 - BARNETT CHARLES AUGUSTUS
- [XY] US 3430777 A 19690304 - ESPOSITO VINCENT J JR
- See references of WO 0236450A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0236450 A1 20020510; AU 1336001 A 20020515; AU 2001213360 B2 20041111; CA 2391208 A1 20020510; CN 1184109 C 20050112; CN 1337915 A 20020227; CN 2515133 Y 20021009; EP 1334040 A1 20030813; EP 1334040 A4 20060913; HK 1043574 A1 20020920; HK 1043574 B 20050708; JP 2003522080 A 20030722

DOCDB simple family (application)
US 0028866 W 20001031; AU 1336001 A 20001031; AU 2001213360 A 20001031; CA 2391208 A 20001031; CN 00802031 A 20001031; CN 01223495 U 20010522; EP 00975286 A 20001031; HK 02104702 A 20020625; JP 2001557357 A 20001031