

Title (en)

Apparatus for emptying a sleeve-bag

Title (de)

Vorrichtung zum Entleeren eines Schlauchbeutels

Title (fr)

Dispositif pour vider un sac tubulaire

Publication

EP 0787655 B2 20090715 (DE)

Application

EP 97100817 A 19970120

Priority

- DE 29601917 U 19960205
- DE 29606895 U 19960416

Abstract (en)

[origin: EP0787655A1] The rigid cap (11) has a rear cylindrical flange (13) for holding one end of the bag. The front of the bag (15) is supported by a transverse wall (12) with an outlet (17). Part of the sheeting of the bag is cut by a recess (16) starting from the transverse wall and connecting with the outlet. The recess contains at least one pin (18) whose point (19) facing the bag is set back into the recess in relation to the surface of the transverse wall supporting the bag. The height of the pin is less than half the depth of the recess. The recess with a transverse wall forms a sharp edge.

IPC 8 full level

B65B 69/00 (2006.01); **B65D 83/00** (2006.01); **B65D 33/36** (2006.01); **B67B 7/48** (2006.01); **B67B 7/86** (2006.01); **B05C 17/005** (2006.01)

CPC (source: EP US)

B05C 17/00553 (2013.01 - EP US); **B05C 17/00586** (2013.01 - EP US); **B65B 69/0041** (2013.01 - EP US); **B67B 7/28** (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 3826887 A1 19900215 - NIEDECKER HERBERT [DE]
- EP 0653362 A1 19950517 - HILTI AG [LI]
- EP 0151922 A2 19850821 - TEROSON GMBH [DE], et al
- DE 29501255 U1 19950309 - HILTI AG [LI]
- DE 9017324 U1 19920416
- DE 4026685 A1 19920227 - BOSTIK GMBH [DE]
- GB 2255596 A 19921111 - BTR PLC [GB]

Cited by

EP1952897A1; ITFI20090020A1; EP1557363A1; DE102004003774A1; DE202008012785U1; US6352177B1; DE102007015842A1; WO2008119469A1; DE102010045935A1; WO2012038038A1; US9022258B2; DE102008014773A1; EP2161216A1; US8955720B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0787655 A1 19970806; EP 0787655 B1 20030528; EP 0787655 B2 20090715; AT E241504 T1 20030615; AU 1230097 A 19970814; AU 719198 B2 20000504; CA 2196005 A1 19970806; CA 2196005 C 20060404; CZ 23797 A3 19971217; CZ 294323 B6 20041110; DE 59710147 D1 20030703; DK 0787655 T3 20030623; ES 2196199 T3 20031216; ES 2196199 T5 20091202; HU 9700276 D0 19970328; HU P9700276 A1 19971128; JP 3822302 B2 20060920; JP H09301448 A 19971125; NO 970491 D0 19970204; NO 970491 L 19970806; PL 182421 B1 20011231; PL 318257 A1 19970818; SK 13197 A3 19970910; SK 283911 B6 20040504; US 6012610 A 20000111

DOCDB simple family (application)

EP 97100817 A 19970120; AT 97100817 T 19970120; AU 1230097 A 19970124; CA 2196005 A 19970127; CZ 23797 A 19970127; DE 59710147 T 19970120; DK 97100817 T 19970120; ES 97100817 T 19970120; HU P9700276 A 19970129; JP 2146397 A 19970204; NO 970491 A 19970204; PL 31825797 A 19970203; SK 13197 A 19970130; US 79610397 A 19970205