

Title (en)
Liquid containment and dispensing device

Title (de)
Behälter- und Ausgabevorrichtung für Flüssigkeit

Title (fr)
Dispositif de rétention et de distribution de liquide

Publication
EP 0970813 A3 20010829 (EN)

Application
EP 99111924 A 19990622

Priority
US 10380398 A 19980624

Abstract (en)
[origin: EP0970813A2] A diaphragm 24 for attaching to a free edge of a perimetrical wall 18 of a pumping chamber 16 of a chassis 12 of a liquid containment and dispensing device 10, said diaphragm being preshaped to have a raised central portion 24a surrounded by a planar edge portion 24b. The raised central portion of the diaphragm permits the diaphragm, when secured to a free edge of the perimetrical wall, to flex with respect to the pumping chamber without leading to the formation of wrinkles in the planar edge portion. The diaphragm has an innermost layer 24c of LDPE, and the planar edge portion thereof is secured by heatstaking to the free edge of the perimetrical wall of the chassis, which is formed by molding from a plastic material. An aluminum crimp ring 26 is provided to tightly retain the planar edge portion of the diaphragm against the free edge of the perimetrical wall of the chassis. <IMAGE>

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B41J 2/175

IPC 8 full level
B65D 83/76 (2006.01); **B05B 1/02** (2006.01); **B41J 2/175** (2006.01)

CPC (source: EP KR)
B05B 1/02 (2013.01 - KR); **B41J 2/17513** (2013.01 - EP); **B41J 2/17559** (2013.01 - EP); **B41J 2/17596** (2013.01 - EP)

Citation (search report)

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- [Y] WO 9822290 A1 19980528 - PBT INT LTD [GB], et al
- [Y] EP 0567270 A2 19931027 - HEWLETT PACKARD CO [US]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 016, no. 090 (M - 1218) 5 March 1992 (1992-03-05)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 008, no. 164 (M - 313) 28 July 1984 (1984-07-28)

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EP 0970813 A2 20000112; **EP 0970813 A3 20010829**; BR 9903277 A 20000425; CA 2275370 A1 19991224; ID 23701 A 20000511; JP 2000025862 A 20000125; KR 20000006333 A 20000125; SG 72962 A1 20000523; TW 415890 B 20001221

DOCDB simple family (application)
EP 99111924 A 19990622; BR 9903277 A 19990623; CA 2275370 A 19990617; ID 990610 D 19990624; JP 17552799 A 19990622; KR 19990023394 A 19990622; SG 1999002955 A 19990618; TW 88110551 A 19990623