

Title (en)
Liquid dispensing bottle with a permeable membrane

Title (de)
Flüssigkeits-Abgabeflasche mit permeabler Wand

Title (fr)
Flacon de distribution de liquide à paroi perméable

Publication
EP 0771734 B1 20020109 (FR)

Application
EP 96402268 A 19961024

Priority
FR 9512781 A 19951030

Abstract (en)
[origin: EP0771734A1] A container, especially a bottle (1) with a dispensing head (3) and a cap (5), an airless pump (4) and a valve in the dispensing head. All or part of the container's wall is made from a plastic material with a high level of air permeability, such as an injectable thermoplastic polymer e.g. polyolefins, PVC or technical polymers. The base of the container can be made from a material which is highly permeable to air, e.g. a silicone elastomer, or the container wall can be loaded with a material which enhances air diffusion, such as chalk. The portions of the container in contact with the dispensing head or cap are treated with an anti-oxidant or antiseptic contact agent which does not migrate into the solution.

IPC 1-7
B65D 1/02

IPC 8 full level
B65D 83/00 (2006.01); **B05B 11/00** (2006.01); **B65D 1/02** (2006.01); **B65D 47/06** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)
B05B 11/0032 (2013.01 - EP US); **B05B 11/00444** (2018.08 - EP US); **B05B 11/00446** (2018.08 - EP US); **B65D 1/0207** (2013.01 - EP US)

Cited by
FR2781767A1; DE29717240U1; FR2964089A1; EP3138599A4; CN1106886C; DE19739990A1; US6059151A; US6227413B1; FR2781768A1; US6360919B1; WO0007738A1; WO2021259801A1; EP3055073B1

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

DOCDB simple family (publication)
EP 0771734 A1 19970507; **EP 0771734 B1 20020109**; AT E211698 T1 20020115; CA 2188982 A1 19970501; CA 2188982 C 20050614; DE 69618425 D1 20020214; DE 69618425 T2 20021121; DK 0771734 T3 20020429; ES 2171215 T3 20020901; FR 2740431 A1 19970430; FR 2740431 B1 19971212; JP 3820291 B2 20060913; JP H09169368 A 19970630; PT 771734 E 20020628; US 5829645 A 19981103

DOCDB simple family (application)
EP 96402268 A 19961024; AT 96402268 T 19961024; CA 2188982 A 19961028; DE 69618425 T 19961024; DK 96402268 T 19961024; ES 96402268 T 19961024; FR 9512781 A 19951030; JP 28530196 A 19961028; PT 96402268 T 19961024; US 73377996 A 19961018