Title (en)

Container with sealed insert and pump for breaking the seal

Title (de)

Behälter mit versiegeltem Einsatz und Pumpe zum Öffnen der Versiegelung

Title (fr)

Récipient avec insert fermé et pompe pour rompre la fermeture

Publication

EP 0904847 B1 20030903 (DE)

Application

EP 98104631 A 19980314

Priority

- DE 19742559 A 19970926
- EP 98104631 A 19980314

Abstract (en)

[origin: WO9916552A1] The bottle neck (5) has a sealing insert (3) with a bottom (5) which is closed in the initial state and which, prior to activating a pumping system engaging by its terminal portion into said insert (3), opens as a result of a pump casing part being screwed forward in the axial direction of the container (1). A receiving chamber is provided between the insert bottom and the pumping system for receiving an active blending which, once the bottom is open (5), is mixed with a liquid located in the container. It is thus possible to deliver with a vacuum pump, after a long conservation period, a liquid drug containing an active agent that cannot remain stable during a long time.

IPC 1-7

B05B 11/00

IPC 8 full level

A61M 11/00 (2006.01); **B65D 47/34** (2006.01); **B05B 9/03** (2006.01); **B05B 11/00** (2006.01); **B65D 81/32** (2006.01); **B67D 99/00** (2010.01)

IPC 8 main group level

B65D (2006.01)

CPC (source: EP US)

B05B 11/0038 (2018.08 - EP US); **B05B 11/1047** (2023.01 - EP US); **B05B 11/1081** (2023.01 - EP US)

Cited by

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Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9916552 A1 19990408; AT E248660 T1 20030915; AU 731460 B2 20010329; AU 9620498 A 19990423; BR 9812367 A 20000919; CA 2303880 A1 19990408; CA 2303880 C 20100427; CN 1112262 C 20030625; CN 1271301 A 20001025; CZ 2000956 A3 20010613; CZ 297286 B6 20061011; DE 19742559 A1 19990506; DE 19742559 C2 19990805; DE 59809472 D1 20031009; DK 0904847 T3 20040112; EP 0904847 A1 19990331; EP 0904847 B1 20030903; ES 2206776 T3 20040516; HU 223435 B1 20040728; HU P0003839 A2 20010228; HU P0003839 A3 20010428; JP 2001518428 A 20011016; JP 4231623 B2 20090304; NO 20001467 D0 20000321; NO 20001467 L 20000321; NO 319538 B1 20050829; PT 904847 E 20040130; RU 2201296 C2 20030327; SK 286670 B6 20090305; SK 4112000 A3 20000912; TR 200000857 T2 20001121; UA 53752 C2 20030217; US 6412659 B1 20020702

DOCDB simple family (application)

DE 9802444 W 19980821; AT 98104631 T 19980314; AU 9620498 A 19980821; BR 9812367 A 19980821; CA 2303880 A 19980821; CN 98809483 A 19980821; CZ 2000956 A 19980821; DE 19742559 A 19970926; DE 59809472 T 19980314; DK 98104631 T 19980314; EP 98104631 A 19980314; ES 98104631 T 19980314; HU P0003839 A 19980821; JP 2000513677 A 19980821; NO 20001467 A 20000321; PT 98104631 T 19980314; RU 2000110627 A 19980821; SK 4112000 A 19980821; TR 200000857 T 19980821; UA 00042377 A 19980821; US 50889300 A 20000317