

Title (en)

Apparatus for delivering a composition with a concentration gradient

Title (de)

Vorrichtung zum Ausgeben eines Produkts mit Konzentrationsgradienten

Title (fr)

Dispositif de distribution d'une composition à gradient de concentration

Publication

EP 1153843 B1 20030730 (FR)

Application

EP 01400909 A 20010409

Priority

FR 0005951 A 20000510

Abstract (en)

[origin: EP1153843A1] A dispenser has a first receptacle for a liquid composition, a device for dispensing the composition and a device selectively admitting air to the receptacle. It also has a siphon that transfers a second composition to the first receptacle to restore the pressure in the first receptacle. A sliding may selectively admit air through an orifice into the first receptacle. The maximum liquid level in both receptacles is lower than the highest point of the siphon. This point has a seal that is removed before first use. The dispensing device is a manual pump mounted in a dispensing head.

IPC 1-7

B65D 47/20; **B65D 47/34**; **B05B 11/00**; **B01F 3/08**

IPC 8 full level

A61J 3/00 (2006.01); **A61J 1/05** (2006.01); **B01F 3/08** (2006.01); **B05B 11/00** (2006.01); **B65D 81/32** (2006.01)

CPC (source: EP US)

B01F 23/45 (2022.01 - EP US); **B05B 11/0037** (2013.01 - EP US); **B05B 11/0044** (2018.07 - EP US); **B05B 11/0078** (2013.01 - EP US); **B05B 11/1081** (2023.01 - EP US)

Cited by

WO2011080234A3

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1153843 A1 20011114; **EP 1153843 B1 20030730**; AR 029076 A1 20030604; AT E246128 T1 20030815; BR 0101906 A 20011226; CA 2347055 A1 20011110; CA 2347055 C 20050712; CN 1125670 C 20031029; CN 1322664 A 20011121; DE 60100522 D1 20030904; DE 60100522 T2 20040603; ES 2203582 T3 20040416; FR 2808784 A1 20011116; FR 2808784 B1 20020726; JP 2002000703 A 20020108; JP 3558607 B2 20040825; MX PA01004654 A 20040910; US 2002005412 A1 20020117; US 6427870 B2 20020806

DOCDB simple family (application)

EP 01400909 A 20010409; AR P010102182 A 20010509; AT 01400909 T 20010409; BR 0101906 A 20010427; CA 2347055 A 20010509; CN 01116940 A 20010509; DE 60100522 T 20010409; ES 01400909 T 20010409; FR 0005951 A 20000510; JP 2001140700 A 20010510; MX PA01004654 A 20010508; US 85227101 A 20010510