

Title (en)

System for sealingly mounting a miniature pump onto a little container

Title (de)

System zur abgedichteten Befestigung einer Miniaturpumpe auf einen Kleinbehälter

Title (fr)

Système d'assemblage étanche d'une pompe miniature sur un réservoir de faible contenance

Publication

**EP 0823288 B1 20031217 (FR)**

Application

**EP 97401880 A 19970805**

Priority

FR 9609866 A 19960805

Abstract (en)

[origin: EP0823288A1] An assembly system for sealing a miniature pump to a small container (R), e.g. of a liquid to be atomised, has the body of the pump made with a sleeve (M) which joins the container with an internal or external force fit. The lateral wall of the pump sleeve or container made with a grooved section (1) which acts as a vent and an adjoining smooth section (2). The two surface sections are designed to slide and engage for their whole height with an opposite smooth surface on the container or sleeve, so that the grooved zone is closed gradually on assembly until the two smooth zones meet. The diameter of the grooved zone is the same or not more than 5 per cent smaller than the diameter of the adjacent smooth zone, and the sleeve has a step at its upper end which acts as a stop for the upper edge of the container.

IPC 1-7

**B05B 11/00**

IPC 8 full level

**B65D 39/04** (2006.01); **B05B 11/00** (2006.01); **B65D 47/34** (2006.01); **B65D 83/76** (2006.01)

CPC (source: EP US)

**B05B 11/0013** (2013.01 - EP US); **B05B 11/0044** (2018.07 - EP); **B05B 11/1047** (2023.01 - EP US); **B05B 11/0097** (2013.01 - EP US)

Cited by

FR2956098A1; CN102791592A; WO2011098714A1; US11633029B2; FR2845675A1; WO2004033347A1; WO2020157421A3

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 0823288 A1 19980211**; **EP 0823288 B1 20031217**; AT E256504 T1 20040115; CA 2212488 A1 19980205; CA 2212488 C 20061219; CY 2432 B1 20041112; DE 69726802 D1 20040129; DE 69726802 T2 20050602; DK 0823288 T3 20040426; ES 2213810 T3 20040901; FR 2751897 A1 19980206; FR 2751897 B1 19981030; JP 3640509 B2 20050420; JP H10203545 A 19980804; PT 823288 E 20040531; US 6010039 A 20000104

DOCDB simple family (application)

**EP 97401880 A 19970805**; AT 97401880 T 19970805; CA 2212488 A 19970801; CY 0400020 A 20040317; DE 69726802 T 19970805; DK 97401880 T 19970805; ES 97401880 T 19970805; FR 9609866 A 19960805; JP 22203797 A 19970805; PT 97401880 T 19970805; US 90647297 A 19970805