

Title (en)

Manually actuated precompression pump for spraying a liquid and dispensing assembly comprising such a pump

Title (de)

Vordruck-Handpumpe zur Zerstäuben einer Flüssigkeit und Abgabevorrichtung mit einer solchen Pumpe

Title (fr)

Pompe manuelle à précompression pour la pulvérisation d'un liquide et ensemble de distribution équipé d'une telle pompe

Publication

EP 0688609 A1 19951227 (FR)

Application

EP 95401226 A 19950524

Priority

FR 9407534 A 19940620

Abstract (en)

The pump (1) consists of a cylindrical housing (3) containing a pumping chamber (2) with an inner piston (7) linked to an actuator (6) and equipped with a return spring (9). It also has a precompression chamber (5) with a second piston (10) and return spring (11), a feed channel (4) and a dispensing nozzle (17) with a jet (20). The precompression chamber is situated in an extension of the pumping chamber so that the liquid inside the pumping chamber passes directly into the precompression chamber when the actuator is operated. The nozzle jet is fixed relative to the body of the pump and has an outlet aperture (21) situated on an axis (Z) which is orthogonal to the axis (X) of the pump housing.

IPC 1-7

B05B 11/00

IPC 8 full level

B05B 11/00 (2006.01); **B65D 47/34** (2006.01); **F04B 9/14** (2006.01)

CPC (source: EP US)

B05B 11/0044 (2018.07 - EP US); **B05B 11/1011** (2023.01 - EP US); **B05B 11/1016** (2023.01 - EP US); **B05B 11/104** (2023.01 - EP US); **B05B 11/1061** (2023.01 - EP US); **B05B 11/0062** (2013.01 - EP US)

Citation (applicant)

- EP 0437131 A1 19910717 - OREAL [FR]
- FR 2634825 A1 19900202 - DEBARD ANDRE [FR]

Citation (search report)

- [A] US 4191313 A 19800304 - BLAKE WILLIAM S [US], et al
- [A] FR 2634825 A1 19900202 - DEBARD ANDRE [FR]
- [A] GB 1099695 A 19680117 - TECH DE PULVERISATION SA SOC
- [A] US 2342288 A 19440222 - LUIGI MAI
- [A] US 4225060 A 19800930 - KUTIK LOUIS F, et al
- [A] EP 0516472 A1 19921202 - CALMAR INC [US]
- [A] US 5192006 A 19930309 - VAN BROCKLIN OWEN F [US], et al

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EP1974825A4; EP1161387A4; WO2007086156A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0688609 A1 19951227; **EP 0688609 B1 19981209**; BR 9502238 A 19960123; CA 2152147 A1 19951221; CA 2152147 C 19980609; DE 69506481 D1 19990121; DE 69506481 T2 19990429; ES 2125570 T3 19990301; FR 2721285 A1 19951222; FR 2721285 B1 19960802; JP 2755556 B2 19980520; JP H0814155 A 19960116; US 5641097 A 19970624

DOCDB simple family (application)

EP 95401226 A 19950524; BR 9502238 A 19950614; CA 2152147 A 19950619; DE 69506481 T 19950524; ES 95401226 T 19950524; FR 9407534 A 19940620; JP 15200595 A 19950619; US 48764895 A 19950607