

Title (en)

DEVICE FOR SPRAYING A FLUID BY MEANS OF A PUMP WHICH IS ACTUATED PERIODICALLY

Publication

**EP 0497709 A3 19920812 (FR)**

Application

**EP 92400360 A 19920122**

Priority

FR 9100958 A 19910129

Abstract (en)

[origin: CA2101553A1] 29 A device for spraying or dispensing a fluid, the device comprising: a single-acting pump having a capacity of less than 500 .mu.l and provided with piston means actuated by a hollow push rod allowing fluid to flow therealong, said piston means sliding in a pump chamber that normally contains fluid to be sprayed or dispensed, to enable said fluid to be expelled; a pusher mounted on said push rod of the pump and communicating with said push rod to enable the fluid to escape; and rapid repetition actuator means having a moving portion for actuating the push rod repetitively; wherein the pusher is connected to said moving portion of the actuator means by a connection that does not leave play in the axial direction of the push rod.

IPC 1-7

**B05B 11/00**

IPC 8 full level

**B05B 11/02** (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP KR US)

**B05B 11/00** (2013.01 - KR); **B05B 11/026** (2023.01 - EP US); **B05B 11/1018** (2023.01 - EP US); **B05B 11/1039** (2023.01 - EP US); **B05B 11/1052** (2023.01 - EP US)

Citation (search report)

- [X] DE 2736532 A1 19781123 - KOYAMA MASAYA
- [A] EP 0401060 A1 19901205 - CONCEPTAIR ANSTALT [LI]
- [A] DE 2645661 A1 19780622 - SCHROTT ELISABETH
- [A] FR 797946 A 19360506 - BOSCH ROBERT
- [AP] EP 0448467 A1 19910925 - STEP SOC TECH PULVERISATION [FR]
- [A] US 3352497 A 19671114 - ABRAMSON LOUIS D
- [AD] FR 2314772 A2 19770114 - STEP SOC TECH PULVERISATION [FR]
- [A] GB 959835 A 19640603 - COUNTY LAB LTD

Cited by

EP0546898A1; FR2689036A1; US5962096A; EP0749909A3; EP0557194A1; EP0598649A1; FR2698083A1; US5415327A; FR2715585A1; EP0669167A1; US5622286A; FR2973012A1; US9156048B2; WO2012131221A1

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