

Title (en)

Trigger type liquid discharge device

Title (de)

Hebelbetätigte Flüssigkeitsaustragsvorrichtung

Title (fr)

Dispositif de distribution de liquides du type à gachette

Publication

EP 1310305 A3 20040310 (EN)

Application

EP 03000944 A 19951026

Priority

- EP 95935573 A 19951026
- JP 28592394 A 19941026
- JP 9402279 W 19941228

Abstract (en)

[origin: EP0738542A1] A trigger type liquid discharge device is provided with a valve structure designed to open only when the liquid inside the device shows a proper discharge pressure and arranged upstream relative to the discharge aperture of the nozzle head thereof and also with a flow path arranged in the cylinder of the pump unit of the device for returning any residual pressure in the liquid flow paths of the device after the end of a liquid discharging cycle. With such an arrangement, it can effectively prevent liquid from dripping out of the discharge aperture because of the residual pressure in the liquid flow paths in the initial and/or final stages of the liquid discharging operation. <IMAGE>

IPC 1-7

B05B 11/00

IPC 8 full level

B05B 11/00 (2006.01)

CPC (source: EP US)

B05B 11/0029 (2013.01 - EP); **B05B 11/0044** (2018.07 - EP); **B05B 11/0064** (2013.01 - EP); **B05B 11/0067** (2013.01 - EP); **B05B 11/0075** (2013.01 - EP); **B05B 11/1011** (2023.01 - EP); **B05B 11/1016** (2023.01 - EP US); **B05B 11/1063** (2023.01 - EP); **B05B 15/58** (2018.01 - EP)

Citation (search report)

- [YA] EP 0295767 A2 19881221 - CALMAR INC [US]
- [Y] US 4317531 A 19820302 - SAITO TADAO, et al
- [Y] US 4271990 A 19810609 - KUTIK LOUIS F, et al
- [Y] US 4183449 A 19800115 - BLAKE WILLIAM S [US]
- [A] EP 0437131 A1 19910717 - OREAL [FR]
- [A] US 4819835 A 19890411 - TASAKI TAKAHARU [JP]
- [PX] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 17 5 June 2001 (2001-06-05)

Cited by

EP1797002A4

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0738542 A1 19961023; **EP 0738542 A4 19980107**; **EP 0738542 B1 20080507**; AU 3754095 A 19960523; AU 708396 B2 19990805; CA 2179888 A1 19960509; CA 2179888 C 20070828; CN 1071599 C 20010926; CN 1137764 A 19961211; DE 69535748 D1 20080619; DE 69535779 D1 20080807; EP 1310305 A2 20030514; EP 1310305 A3 20040310; EP 1310305 B1 20080625; EP 1923143 A2 20080521; EP 1923143 A3 20080820; EP 1923143 B1 20100908; JP 3720054 B2 20051124; KR 100407125 B1 20040527; WO 9613334 A1 19960509

DOCDB simple family (application)

EP 95935573 A 19951026; AU 3754095 A 19951026; CA 2179888 A 19951026; CN 95191078 A 19951026; DE 69535748 T 19951026; DE 69535779 T 19951026; EP 03000944 A 19951026; EP 07024747 A 19951026; JP 51444596 A 19951026; JP 9502203 W 19951026; KR 19960703393 A 19960624