

Title (en)
Manually actuated atomiser

Title (de)
Zerstäuber für manuelle Betätigung

Title (fr)
Pulvérisateur actionné à la main

Publication
EP 1312418 A3 20031105 (DE)

Application
EP 02023179 A 20021016

Priority
DE 10154237 A 20011107

Abstract (en)
[origin: DE10154237A1] The manual sputterer for fluids, to apply a droplet spray to a surface, has energy stored by a spring (59) using a coil spring, a plate spring or a gas spring. together with a piston (81) and two channels. The spray action is triggered by manual release (58) of a locking mechanism (74). The spring is outside the fluid storage zone, and acts on the piston to force a small volume of the fluid out of the cylinder (53) at a pressure of 1-5 MPa (10-50 bar). The distribution of the droplet sizes can be adjusted, with a mean droplet size of $\leq 50 \mu m$. The mass flow through the jet (60) is $\leq 0.4 g/second$.

IPC 1-7
B05B 11/00; B05B 9/08; B05B 1/34

IPC 8 full level
B05B 1/34 (2006.01); **B05B 9/08** (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP US)
B05B 1/3436 (2013.01 - EP US); **B05B 9/0883** (2013.01 - EP US); **B05B 11/1091** (2023.01 - EP US); **B05B 1/3447** (2013.01 - EP US)

Citation (search report)

- [XY] US 5662271 A 19970902 - WESTON TERENCE EDWARD [GB], et al
- [YA] US 4074861 A 19780221 - MAGERS WALLACE F, et al
- [YA] US 4071196 A 19780131 - BURKE JAMES E, et al
- [X] FR 1147172 A 19571120
- [X] GB 331141 A 19300626 - FRED CAMILE PHILLIPS
- [X] FR 2181347 A5 19731130 - YOSHINO KOGYOSHO CO LTD [JP]
- [X] US 4176764 A 19791204 - ANTENORE RONALD L [US], et al
- [A] US 3185355 A 19650525 - ELMER LIPMAN
- [A] US 5067655 A 19911126 - FARAGO ZOLTAN [DE], et al

Cited by
WO2004062813A1; AU2003300549B2; US8052627B2; US9724482B2; US9744313B2; WO2009103510A1; WO2010094305A1; WO2004034923A1; US10011906B2; US10220163B2; US10124125B2; US10722666B2; US9682202B2; US9827384B2; US9943654B2; WO2019016410A1; US10004857B2; US10124129B2; US10894134B2; US11642476B2; US9364841B2; US10016568B2; US10195374B2; US10716905B2; US9757750B2; US10099022B2; WO2019016409A3

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
EP 1312418 A2 20030521; **EP 1312418 A3 20031105**; **EP 1312418 B1 20080827**; AT E406215 T1 20080915; DE 10154237 A1 20030515; DE 50212700 D1 20081009; DK 1312418 T3 20081013; ES 2312516 T3 20090301; US 2003209238 A1 20031113; US 7341208 B2 20080311

DOCDB simple family (application)
EP 02023179 A 20021016; AT 02023179 T 20021016; DE 10154237 A 20011107; DE 50212700 T 20021016; DK 02023179 T 20021016; ES 02023179 T 20021016; US 28918302 A 20021107