

Title (en)

INJECTION DEVICE AND METHOD FOR INJECTING A FLUID

Title (de)

EINSPRITZEINRICHTUNG UND VERFAHREN ZUM EINSPRITZEN VON FLUID

Title (fr)

SYSTEME D'INJECTION ET PROCEDE POUR INJECTER UN FLUIDE

Publication

**EP 1252437 A2 20021030 (DE)**

Application

**EP 01909455 A 20010112**

Priority

- DE 0100098 W 20010112
- DE 10002273 A 20000120

Abstract (en)

[origin: WO0152916A2] The invention relates to an injection device, with an injection nozzle (42), a pressure amplifier (12), for amplifying a primary pressure, a first valve arrangement (32), for operating the pressure amplifier (12) and an actuator for operating the first valve arrangement (32), whereby the pressure amplifier (12) is activated in a first state of the first valve arrangement (32), the pressure amplifier (12) is deactivated in a second state of the first valve arrangement (32) and a flow limiter to the injection nozzle (42) is provided. The invention further relates to a method for favourable application of the above device.

IPC 1-7

**F02M 59/10**

IPC 8 full level

**F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 57/02** (2006.01); **F02M 59/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP KR US)

**F02M 45/00** (2013.01 - KR); **F02M 47/027** (2013.01 - EP US); **F02M 57/025** (2013.01 - EP US); **F02M 57/026** (2013.01 - EP US); **F02M 59/105** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0152916 A2 20010726**; **WO 0152916 A3 20020214**; AT E277279 T1 20041015; DE 10002273 A1 20010802; DE 50103747 D1 20041028; EP 1252437 A2 20021030; EP 1252437 B1 20040922; JP 2003520317 A 20030702; KR 20020074481 A 20020930; TW 558607 B 20031021; US 2003127539 A1 20030710

DOCDB simple family (application)

**DE 0100098 W 20010112**; AT 01909455 T 20010112; DE 10002273 A 20000120; DE 50103747 T 20010112; EP 01909455 A 20010112; JP 2001552963 A 20010112; KR 20027009284 A 20020719; TW 90101010 A 20010117; US 18148102 A 20021206