

Title (en)

Fluid injector with means to prevent rotation of the valve needle

Title (de)

Einspritzventil mit Mittel, um Ventilnadelrotation zu verhindern

Title (fr)

Soupape d'injection avec moyens pour eviter la rotation de l'aiguille

Publication

**EP 1559907 B2 20100811 (EN)**

Application

**EP 04001803 A 20040128**

Priority

EP 04001803 A 20040128

Abstract (en)

[origin: EP1559907A1] The fluid injector has a housing, an actuator unit and a valve body. The valve body has a cartridge (21) with a recess (211), that forms an injection nozzle (213), if it rests with its seat area on a needle seat of the cartridge. A further recess (217) or raised area in the cartridge (21), a holding element and a recess (226) or raised area in the needle (22) are formed and arranged in a way, that they cooperate to fix the needle (22) in its rotational position relative to the cartridge (21). <IMAGE>

IPC 8 full level

**F02M 61/08** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

**F02M 51/0603** (2013.01); **F02M 61/08** (2013.01); **F02M 61/12** (2013.01)

Citation (opposition)

Opponent :

- JP 2002089397 A 20020327 - KEIHIN CORP
- GB 1005354 A 19650922 - EMMERICH SATZGER
- GB 1329525 A 19730912 - GEN MOTORS CORP

Cited by

EP2246557A1; WO2006128757A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

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DE 602004003212 T2 20070329; DE 602004003212 T3 20110317

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