

Title (en)

Metering device with adjustable flow rate and method for setting a flow rate of a metering device

Title (de)

Dosiergerät mit einstellbarem Durchfluss und Verfahren zur Einstellung des Durchflusses eines Dosiergeräts

Title (fr)

Doseur à débit réglable et procédé pour établir le débit d'un doseur

Publication

EP 1391606 A1 20040225 (EN)

Application

EP 02018661 A 20020820

Priority

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Abstract (en)

The invention relates to a metering device for dosing pressurized fluids, comprising a housing (12) having an end part provided with an outlet passage (20) terminating with a metering opening (22), an axially moveable valve needle passing through the outlet passage (20) and controlling opening and closing of the metering opening (22), a piezoelectric actuator assembly (30) in axial alignment with the valve needle and cooperating with the valve needle to control its axial movement, means for transmitting an axial extension of the piezoelectric actuator assembly (30) to the valve needle to displace the needle from the closing position when activated, and spring means for urging the valve needle in the closing position. An adjustment element (40) is arranged at the end part of the housing (12) opposite to the end part provided with the outlet passage (20), applying an adjustable pressure force on the piezoelectric actuator assembly (30), the valve needle and the spring means, thereby setting a flow rate for the metering device. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

F02M 51/0603 (2013.01); **F02M 61/167** (2013.01); **F02M 61/205** (2013.01)

Citation (applicant)

EP 1046809 A2 20001025 - SIEMENS AG [DE]

Citation (search report)

- [AY] GB 2094940 A 19820922 - NISSAN MOTOR
- [Y] WO 0129400 A2 20010426 - WESTPORT RES INC [CA], et al
- [DY] EP 1046809 A2 20001025 - SIEMENS AG [DE]
- [A] EP 1167747 A2 20020102 - DENSO CORP [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 190 (M - 1113) 16 May 1991 (1991-05-16)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11 30 September 1998 (1998-09-30)

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DE FR IT

DOCDB simple family (publication)

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