

Title (en)
FUEL-INJECTION DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZEINRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

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Application
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Abstract (en)
[origin: WO03054374A1] The invention relates to a fuel-injection device comprising a high-pressure fuel pump (10) for each cylinder of the internal combustion engine. Said pump has a working chamber (22) and a fuel-injection valve (12) connected to the latter. A connection from the working chamber (22) to a relief area (78) is controlled by a control valve (70) that is actuated by means of a piezoelectric actuator (84). The fuel-injection valve (12) comprises two concentric injection valve members (28, 128), which are used to control at least a first and a second injection orifice (32, 132) and can be displaced in an opening direction (29) in opposition to a closing force, by means of the pressure created in the working chamber (22). The second injection valve member (128) is at least indirectly subjected to the pressure prevailing in the fuel-filled pressure control chamber (60) in a closing direction.

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