

Title (en)

FUEL INJECTOR COMPRISING A DIRECTLY CONTROLLED INJECTION VALVE MEMBER WITH A DOUBLE-SEAT

Title (de)

KRAFTSTOFFINJEKTOR MIT DIREKTGESTEUERTEM EINSPRITZVENTILGLIED MIT DOPPELSITZ

Title (fr)

INJECTEUR DE CARBURANT COMPRENANT UN ELEMENT DE SOUPAPE D'INJECTION A COMMANDE DIRECTE QUI PRESENTE UN DOUBLE SIEGE

Publication

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Application

**EP 06700750 A 20060117**

Priority

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Abstract (en)

[origin: WO2006092344A1] Disclosed is a fuel injector (110) for supplying combustion chambers of self-igniting internal combustion engines with fuel. Said fuel injector (110) is supplied with pressurized fuel via a high-pressure source (114) while featuring direct control of an injection valve member (128) by means of a piezo actuator (140) via a hydraulic transducer (174). The injection valve member (128) of the fuel injector (110) is also provided with a double seat. For this purpose, the injection valve member (128) is equipped with two sealing seats (182, 184) which subdivide a nozzle chamber (122) of the fuel injector (110) into three partial spaces (188, 190, 192). A first partial space (188) and a third partial space (192) are fluidically interconnected and are supplied with fuel when the injection valve member (128) is closed. The second partial space (190), which is connected to injection ports (136), is fluidically disconnected from the partial spaces (188, 192) with the aid of the sealing seats (182, 184). The inventive assembly encompassing a combination of direct needle control and a double seat of the injection valve member (128) has the advantage that the fuel injector (110) is unthrottled while the injection valve member is lifted to a very small extent such that particularly also short piezo actuators (140) can be used.

IPC 8 full level

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Citation (search report)

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