

Title (en)

INJECTION VALVE FOR INJECTING FUEL INTO THE COMBUSTION CHAMBER OF AN INTERNAL COMBUSTION ENGINE

Title (de)

EINSPRITZVENTIL FÜR DIE BRENNSTOFFEINSPRITZUNG IN DEN BRENNRAUM EINER BRENNKRAFTMASCHINE

Title (fr)

SOUPAPE D'INJECTION DESTINEE A INJECTER DU CARBURANT DANS LA CHAMBRE DE COMBUSTION D'UN MOTEUR A COMBUSTION INTERNE

Publication

**EP 1287255 A1 20030305 (DE)**

Application

**EP 01953161 A 20010525**

Priority

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- EP 0105973 W 20010525

Abstract (en)

[origin: WO0190566A1] The invention relates to an injection valve (1) for injecting fuel into the combustion chamber of an internal combustion engine. The injector needle (17) of the injection valve (1) is guided inside the housing in such a way that it can be displaced longitudinally with a shaft (19) in order to open and close the injection cross-sections. The injector needle (17) is actuated by the fuel pressure which acts upon the injector needle and by a closing spring (16) acting in the closing direction of the injector needle. The closing spring (16) is pre-compressed between abutments on the injector needle (17) and the housing and is situated on the perimeter of the injector needle in the area between the injector needle guide (26) and the valve seat (18). One advantage of said arrangement is the compact construction of the injection valve (1) and the low dead volume of the control chamber (11) on the reverse side of the injector needle.

IPC 1-7

**F02M 47/02**; **F02M 47/00**

IPC 8 full level

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CPC (source: EP KR US)

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