

Title (en)

FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication

**EP 1664523 A1 20060607 (DE)**

Application

**EP 04762474 A 20040722**

Priority

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Abstract (en)

[origin: WO2005026526A1] The invention relates to a fuel injection valve for internal combustion engines. The inventive fuel injection valve comprises an outer valve seat (107), configured in a valve body (1) and having a conical shape with an outer cone angle (a), from which at least one outer injection opening (10) branches off. An inner valve seat (207) also has a conical shape with an inner cone angle (b) and at least one inner injection opening (12) branching off. A hollow valve needle (15) is disposed inside the valve body (1) and has an outer valve face (30) with which it interacts with the outer valve seat (107), thereby controlling the opening of the at least one outer injection opening (10). A valve needle (17) is disposed inside the hollow valve needle (15) and interacts with an inner valve face (32) with the inner valve seat (207), thereby controlling the at least one inner injection opening (12). The cone angles (a; b) of the inner valve seat (207) and the outer valve seat (107) are different from each other.

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