

Title (en)

FUEL INJECTION VALVE FOR COMBUSTION ENGINES

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication

EP 1627147 A1 20060222 (DE)

Application

EP 03782138 A 20031206

Priority

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- DE 10322826 A 20030519

Abstract (en)

[origin: WO2004104406A1] The invention relates to a fuel injection valve for combustion engines, in which a valve seat (18) is provided whence at least one injection opening (20) departs. A valve needle (8) with a valve sealing surface (35), which is formed on the valve needle (8), interacts with the valve seat (18) whereby closing and opening the at least one injection opening (20). A first sealing edge (26) and a second sealing edge (28) are formed on the valve sealing surface (35) whereby, when the valve needle (8) is closed, the first sealing edge (26) rests against the valve seat (18) in a sealing manner upstream from the at least one injection opening (20), and the second sealing edge (28) is located downstream from the at least one injection opening (20). The valve needle (8) comprises, on its face oriented toward the valve seat (18), a recess (37) so that a sealing lip (40) is formed, which can be inwardly deformed in an elastic or ductile manner by the valve needle (8) resting upon the valve seat (18), and on which the second sealing edge (28) is formed.

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