Title (en)

FUEL INJECTION NOZZLE FOR INTERNAL-COMBUSTION ENGINES

Publication

EP 0061529 B1 19850619 (DE)

Application

EP 81109692 A 19811114

Priority

DE 3112467 A 19810328

Abstract (en)

[origin: EP0061529A1] 1. Fuel injection nozzle for internal-combustion engines, having a valve needle (12) opening counter to the flow direction of the fuel, formed onto which is a sealing cone (18), interacting with a valve seat (16) on the nozzle body (10), and onto which then is formed a restricting neck (24), which in the closed position of the valve needle (12) immerses with a cylindrical section (26) into a cylindrical section (35) of the nozzle bore (20) downstream of the valve seat (16) and delimits therein, over the extent of a first partial stroke of the valve needle (12), a restricting metering gap (40) for governing the size of a preliminary fuel jet, characterised in that a further cylindrical section (32, 38) is formed on the restricting neck (24) and/or in the nozzle bore (20) downstream of the metering gap (40), which section, in the closed position of the valve needle (12), forms with an opposite wall section (38, 32) of the nozzle bore (20) or of the restricting neck (24) a protective gap (42) of restricting cross section, the length of which is smaller in the closed position of the valve needle (12) than the length of the metering gap (40) formed in this position, and which extends as the opening stroke of the valve needle (12) begins, enlarging faster than the metering gap (40), up to a cross section not even restricting the main fuel jet.

IPC 1-7

F02M 61/06

IPC 8 full level

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CPC (source: EP)

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Cited by

KR100722012B1; GB2143274A; GB2185070A

Designated contracting state (EPC)

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