

Title (en)
FUEL INJECTOR FOR INTERNAL COMBUSTION ENGINES

Publication
EP 0137122 A3 19870304 (DE)

Application
EP 84107560 A 19840629

Priority
DE 3329380 A 19830813

Abstract (en)
[origin: US4605171A] A fuel injection nozzle for internal combustion engines, having an outwardly opening valve needle, which is connected with a piston upon which a damping cap is placed, which is supported on a shoulder integral with the housing. In the damping cap, a damping chamber is formed, which communicates via a throttle conduit with the flow path of the fuel. The diameter of the piston is smaller than the cross section enclosed by the valve seat, as a result of which an annular shoulder is attained, on which the unthrottled fuel pressure acts upon the valve needle in the opening direction. This disposition has the advantage that at lower rpm and smaller fuel quantities, the valve needle can be effectively braked even up to relatively long needle strokes, without the injection duration becoming overly long at higher rpm.

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F02M 61/08; **F02M 61/20**

IPC 8 full level
F02M 61/08 (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP US)
F02M 61/08 (2013.01 - EP US); **F02M 61/20** (2013.01 - EP US)

Citation (search report)
• [E] EP 0126947 A2 19841205 - BOSCH GMBH ROBERT [DE]
• [A] EP 0084662 A1 19830803 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)
DE FR GB IT

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EP 84107560 A 19840629; DE 3329380 A 19830813; JP 15218984 A 19840724; US 60004384 A 19840413