

Title (en)
FUEL INJECTOR FOR INTERNAL-COMBUSTION ENGINES

Publication
EP 0084662 B1 19860326 (DE)

Application
EP 82111887 A 19821221

Priority
• DE 3202364 A 19820126
• DE 3220398 A 19820529

Abstract (en)
[origin: US4531676A] A fuel injection nozzle for internal combustion engines, having a valve needle arranged to open toward the outside and said valve needle further connected with a piston which defines a fuel-filled damping chamber, which communicates with the flow path of the fuel only via a throttle conduit during the opening stroke of the valve needle. The damping chamber is formed in a cap which is placed onto the piston. As a result, jamming of the elements in the radial direction is avoided. Furthermore, the piston may be embodied by the valve needle per se, resulting in a simple and space-saving construction. By means of the appropriate embodiment and supporting of the cap, the damping effect can be limited dependent on the stroke and/or the travel speed of the valve needle.

IPC 1-7
F02M 61/08

IPC 8 full level
F02M 61/08 (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 61/08 (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US); **F02M 2200/304** (2013.01 - EP US)

Citation (examination)
DE 928499 C 19550602 - PAPST HERMANN

Cited by
EP0126947A3; US4730785A; EP0096312A1; EP0132623A3; EP0137122A3; EP0118816A1; FR2536794A1; EP3470657A1; EP0119894B1; WO8606441A1; WO8402379A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0084662 A1 19830803; EP 0084662 B1 19860326; DE 3220398 A1 19830728; DE 3270185 D1 19860430; US 4531676 A 19850730

DOCDB simple family (application)
EP 82111887 A 19821221; DE 3220398 A 19820529; DE 3270185 T 19821221; US 42119682 A 19820922