

Title (en)
FUEL INJECTION APPARATUS

Publication
EP 0375928 B1 19930512 (DE)

Application
EP 89121483 A 19891121

Priority
DE 3844365 A 19881230

Abstract (en)
[origin: EP0375928A2] In the case of a fuel injection apparatus with an injection nozzle (3) opening at predetermined pressure, to which fuel can be fed under pressure, the injection nozzle chamber (2) is connected to a fuel feed line (8) by way of an outward closing non-return valve (9), the pressure in the fuel feed line (8) being lower than the opening pressure of the injection nozzle. In addition, the injection nozzle chamber (2) is connected to a working chamber (14) of a spring-loaded working piston (12), the displacement movement of which is brought about by the action of the spring force in order to increase the pressure in the nozzle chamber (2) in excess of the opening pressure of the injection nozzle (1) by relieving a separate working chamber (20) of the spring-loaded working piston (12). <IMAGE>

IPC 1-7
F02M 57/02; **F02M 59/18**

IPC 8 full level
F02M 45/04 (2006.01); **F02M 45/06** (2006.01); **F02M 47/02** (2006.01); **F02M 57/02** (2006.01); **F02M 59/18** (2006.01); **F02M 61/08** (2006.01); **F02M 61/12** (2006.01)

CPC (source: EP US)
F02M 45/06 (2013.01 - EP US); **F02M 57/02** (2013.01 - EP US); **F02M 59/18** (2013.01 - EP US); **F02M 61/08** (2013.01 - EP US); **F02M 61/12** (2013.01 - EP US)

Cited by
DE19531870A1; FR2738295A1; DE19531870C2; WO9313309A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0375928 A2 19900704; **EP 0375928 A3 19901107**; **EP 0375928 B1 19930512**; DE 3844365 A1 19900705; DE 58904349 D1 19930617; JP 3124280 B2 20010115; JP H02221672 A 19900904; US 5020498 A 19910604

DOCDB simple family (application)
EP 89121483 A 19891121; DE 3844365 A 19881230; DE 58904349 T 19891121; JP 33886889 A 19891228; US 45209089 A 19891218