

Title (en)  
FUEL INJECTION DEVICE FOR A DIESEL INTERNAL COMBUSTION ENGINE WITH PREINJECTION

Publication  
**EP 0282508 B1 19910306 (DE)**

Application  
**EP 87905421 A 19870904**

Priority  
CH 361786 A 19860909

Abstract (en)  
[origin: WO8802066A1] An injection pump (3) is driven by a drive system (27) with an axial piston (28). The drive system (27) is connected to a first control unit (38) provided with a main and secondary slide valve. The pressure medium of the drive system (27) is not in physical contact with the fuel circuit. Control pistons on the first control unit are connected with discharge drillings (11, 12) in the cylinder (4) of the pump (3) as well as with a second control unit (50). Annular spaces (18, 19, 20) opening into the pumping chamber (6) are provided on the piston body (7) of the pump (3). The annular spaces (18, 19, 20) co-operate with discharge drillings (11, 12) and are provided with control edges. At least one of these annular spaces causes the interruption of the injection of fuel via the nozzle (1). Several valves (51, 53) of the second control unit (50) regulate the pressure in the pump chamber (6) and control fuel admission and delivery. Pressure surges occurring at the discharge drillings (11, 12) cause actuation movements in the first and second control units (38, 50).

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