

Title (en)

Single solenoid floating piston distributor pump.

Title (de)

Verteilerpumpe mit durch Einzelelektroventil gesteuertem Freikolben.

Title (fr)

Pompe distributrice à piston libre commandé par une électrovanne unique.

Publication

EP 0055654 A1 19820707 (EN)

Application

EP 81402001 A 19811215

Priority

US 21731180 A 19801217

Abstract (en)

A pump including a metering chamber (40) and a timing chamber (50) formed on either side of a floating piston (56) slidably mounted in an axially extending bore. An electromagnetic control valve (18) controls the discharge of fuel from the timing chamber (50) for creating a variable hydraulic link between a plunger (58) and the floating piston (56) to thereby control the injection timing. In order to vary the quantity of fuel stored in the metering chamber (40) during the downward movement of the floating piston (56), the control valve (18) is variably opened for the admission of fuel at supply pressure into the timing chamber (50), thereby arresting the metering piston (56) in a predetermined position.

IPC 1-7

F02M 59/32; F02M 41/06

IPC 8 full level

F02M 41/06 (2006.01); **F02M 59/32** (2006.01); **F02M 59/36** (2006.01)

CPC (source: EP)

F02M 41/06 (2013.01); **F02M 59/32** (2013.01); **F02M 59/366** (2013.01)

Citation (search report)

- EP 0014142 A1 19800806 - BENDIX CORP [US]
- GB 1306442 A 19730214 - EATON CORP
- DE 1919969 A1 19701112 - BOSCH GMBH ROBERT
- US 3951117 A 19760420 - PERR JULIUS P
- US 4235374 A 19801125 - ERWIN LOUIS R [US], et al

Cited by

US4583510A; CN106968854A; GB2284024B; EP0320462A1; US4928656A; WO9954271A1

Designated contracting state (EPC)

AT DE FR GB IT

DOCDB simple family (publication)

EP 0055654 A1 19820707; BR 8108163 A 19820928; CA 1170903 A 19840717; ES 508050 A0 19821101; ES 8300941 A1 19821101;
JP S57124066 A 19820802

DOCDB simple family (application)

EP 81402001 A 19811215; BR 8108163 A 19811216; CA 391022 A 19811126; ES 508050 A 19811216; JP 20260581 A 19811217