

Title (en)  
Compact high performance fuel system with accumulator

Title (de)  
Kompakte Kraftstoffanlage hoher Leistung mit Speicher

Title (fr)  
Système d'alimentation en carburant haute performance, compact, à accumulateur

Publication  
**EP 0889233 A3 20000202 (EN)**

Application  
**EP 98118101 A 19940506**

Priority

- EP 94917935 A 19940506
- US 5748993 A 19930506
- US 5751093 A 19930506
- US 11769793 A 19930908

Abstract (en)  
[origin: WO9427041A1] A unitized fuel supply assembly is disclosed including an in-line reciprocating cam driven pump (14) for supplying fuel to an accumulator (12) from which fuel is directed to a plurality of engine cylinders by means of a distributor (16) mounted on the unitized assembly. Dual pump control valves (20) provide fail safe electronic control over the effective pump displacement. One or more injection control valves mounted on the distributor are provided to control injection timing and quantity. The accumulator (12) contains a labyrinth of interconnected chambers (36) which are shaped and positioned to produce a minimum overall package size while providing for easy manufacture.

IPC 1-7  
**F02M 63/02**; **F02M 55/02**; **F02M 41/16**; **F02M 41/04**; **F02M 41/06**; **F02M 45/02**; **F02M 59/36**; **F02M 59/46**

IPC 8 full level  
**F02D 41/20** (2006.01); **F02D 41/38** (2006.01); **F02M 41/04** (2006.01); **F02M 41/06** (2006.01); **F02M 41/16** (2006.01); **F02M 45/04** (2006.01); **F02M 45/12** (2006.01); **F02M 47/00** (2006.01); **F02M 51/00** (2006.01); **F02M 55/02** (2006.01); **F02M 59/30** (2006.01); **F02M 59/34** (2006.01); **F02M 59/36** (2006.01); **F02M 59/44** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01); **F04B 9/06** (2006.01)

CPC (source: EP)  
**F02D 41/20** (2013.01); **F02D 41/3827** (2013.01); **F02D 41/3845** (2013.01); **F02M 41/04** (2013.01); **F02M 41/06** (2013.01); **F02M 41/16** (2013.01); **F02M 45/04** (2013.01); **F02M 45/12** (2013.01); **F02M 51/00** (2013.01); **F02M 55/02** (2013.01); **F02M 55/025** (2013.01); **F02M 59/30** (2013.01); **F02M 59/34** (2013.01); **F02M 59/36** (2013.01); **F02M 59/44** (2013.01); **F02M 59/46** (2013.01); **F02M 59/466** (2013.01); **F02M 63/00** (2013.01); **F02M 63/0003** (2013.01); **F02M 63/0007** (2013.01); **F02M 63/0008** (2013.01); **F02M 63/0225** (2013.01); **F04B 9/06** (2013.01); **F02D 41/408** (2013.01); **F02D 2041/2017** (2013.01); **F02D 2041/2055** (2013.01); **F02D 2041/2058** (2013.01); **F02D 2041/224** (2013.01); **F02D 2041/225** (2013.01); **F02D 2250/02** (2013.01); **F02D 2250/31** (2013.01); **F02M 2200/04** (2013.01); **F02M 2200/40** (2013.01); **F04B 2205/05** (2013.01); **F04B 2205/15** (2013.01)

Citation (search report)

- [DXA] US 2446497 A 19480803 - THOMAS ALDEN P
- [XA] GB 2099086 A 19821201 - MASCHF AUGSBURG NUERNBERG AG
- [PA] DE 4304967 A1 19931028 - BOSCH GMBH ROBERT [DE]
- [A] EP 0307947 A2 19890322 - NIPPON DENSO CO [JP]
- [A] US 5029568 A 19910709 - PERR JULIUS P [US]

Cited by  
DE19954206A1; US10247127B2; WO2006131426A1; EP0960275B1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)  
**WO 9427041 A1 19941124**; AT E178973 T1 19990415; AU 6945894 A 19941212; CN 1055745 C 20000823; CN 1111065 A 19951101; DE 69417846 D1 19990520; DE 69417846 T2 19990812; EP 0654122 A1 19950524; EP 0654122 A4 19960320; EP 0654122 B1 19990414; EP 0889233 A2 19990107; EP 0889233 A3 20000202; JP H07509042 A 19951005

DOCDB simple family (application)  
**US 9405108 W 19940506**; AT 94917935 T 19940506; AU 6945894 A 19940506; CN 94190400 A 19940506; DE 69417846 T 19940506; EP 94917935 A 19940506; EP 98118101 A 19940506; JP 52560994 A 19940506