

Title (en)  
FUEL INJECTION SYSTEM

Title (de)  
BRENNSTOFFEINSPRITZUNGSANORDNUNG

Title (fr)  
SYSTEME D'INJECTION DE CARBURANT

Publication  
**EP 1045984 B1 20041103 (EN)**

Application  
**EP 99941118 A 19990813**

Priority  
• US 9918434 W 19990813  
• US 13609098 A 19980818

Abstract (en)  
[origin: WO0011344A1] A fuel injection system (10) includes a fuel body (12) having a compact fuel chamber (14) connected through individual flexible fuel tubes (26) with separate fuel injectors (28) mounted on the separate cylinder inlet passages of an engine. The system may have an integral fuel pressure regulator (30) or the regulator may be located separately, for example with the fuel pump in a vehicle fuel tank. The pressure regulator (30) may include a unitized diaphragm and valve assembly (36) which may be dropped into a housing with a valve seat (80) in the fuel body (12) and enclosed by cover (72) and spring means (68) to form an integrated system. The unitized assembly (36) can also be used in other applications. Pulsation damping may be provided by a flexible wall (38, 104) of the fuel chamber. The flexible wall may be the pressure regulator diaphragm (38) or a resilient wall (104) designed for the purpose.

IPC 1-7  
**F02M 69/46**; **F02M 69/54**; **F02M 55/02**

IPC 8 full level  
**F02M 55/02** (2006.01); **F02M 69/46** (2006.01); **F02M 69/54** (2006.01)

CPC (source: EP)  
**F02M 55/025** (2013.01); **F02M 55/04** (2013.01); **F02M 69/465** (2013.01); **F02M 69/54** (2013.01)

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 0011344 A1 20000302**; AU 5483399 A 20000314; DE 69921610 D1 20041209; DE 69921610 T2 20051020; EP 1045984 A1 20001025; EP 1045984 B1 20041103

DOCDB simple family (application)  
**US 9918434 W 19990813**; AU 5483399 A 19990813; DE 69921610 T 19990813; EP 99941118 A 19990813