

Title (en)  
Fuel injection system

Title (de)  
Brennstoffeinspritzsystem

Title (fr)  
Système d'injection de carburant

Publication  
**EP 2261498 B1 20150527 (EN)**

Application  
**EP 10180366 A 20030213**

Priority  
• EP 03250874 A 20030213  
• GB 0203615 A 20020215

Abstract (en)  
[origin: EP1336752A2] A fuel injection system for use in an internal combustion engine having an engine housing comprises two or more unit pumps (18) and a plurality of fuel injectors (26), each of the unit pumps being received, in use, within a pocket provided in the engine housing and including a pumping plunger (30) that is reciprocable within a plunger bore (32) under the influence of a drive arrangement (40, 42, 46), to cause fuel pressurisation within a pumping chamber (36). Each drive arrangement includes a cam (46) that is mounted upon a cam shaft of the engine, which extends through the engine housing and which carries or is formed with the or each of the other cams. An inlet metering valve arrangement (50) is arranged to control the rate of flow of fuel into each pumping chamber (36), thereby to control the quantity of fuel to be pressurised within the pumping chamber during a pumping cycle. An outlet valve arrangement (64) is arranged to control the delivery of pressurised fuel from the pumping chamber (36) directly to an accumulator volume (22) through an associated high pressure fuel line (70), said accumulator volume being arranged to supply pressurised fuel to all of the injectors (26) of the system. An engine installation incorporating the fuel injection system and the cam drive arrangement for each unit pump (18) is also provided by the present invention. <IMAGE>

IPC 8 full level  
**F02M 59/04** (2006.01); **F02M 39/02** (2006.01); **F02M 55/02** (2006.01); **F02M 59/06** (2006.01); **F02M 59/10** (2006.01); **F02M 59/36** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)  
**F02M 39/02** (2013.01); **F02M 55/025** (2013.01); **F02M 59/04** (2013.01); **F02M 59/102** (2013.01); **F02M 59/366** (2013.01); **F02M 63/0225** (2013.01)

Citation (examination)  
• GB 2108214 A 19830511 - BOSCH GMBH ROBERT  
• DE 19644915 A1 19980430 - BOSCH GMBH ROBERT [DE]

Cited by  
US10830194B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)  
**EP 1336752 A2 20030820**; **EP 1336752 A3 20041208**; **EP 1336752 B1 20150408**; EP 2261498 A1 20101215; EP 2261498 B1 20150527; GB 0203615 D0 20020403; GB 2385386 A 20030820; HU E026302 T2 20160628

DOCDB simple family (application)  
**EP 03250874 A 20030213**; EP 10180366 A 20030213; GB 0203615 A 20020215; HU E10180366 A 20030213