

Title (en)
Unit injector.

Title (de)
Pumpedüse.

Title (fr)
Pompe-injecteur.

Publication
EP 0413454 A1 19910220 (EN)

Application
EP 90308314 A 19900730

Priority
GB 8918600 A 19890815

Abstract (en)
A unit injector system includes a rotary cam (22A) for imparting inward movement to a plunger (19) to displace fuel from a pumping chamber to a fuel injection nozzle (12). A spill valve (29) is utilised to control the amount of fuel supplied. The leading flank of the cam has a first portion (B1) which after initial inward movement of the plunger effects inward movement of the plunger at a substantially constant rate, a second portion (B2) during which the rate of movement is increased and a third portion (B3) during which the rate of movement of the plunger decreases until the crest of the cam is reached.

IPC 1-7
F02M 57/02; **F02M 59/10**

IPC 8 full level
F02M 51/00 (2006.01); **F02M 45/06** (2006.01); **F02M 57/02** (2006.01); **F02M 59/10** (2006.01)

CPC (source: EP)
F02M 45/063 (2013.01); **F02M 57/023** (2013.01); **F02M 59/102** (2013.01)

Citation (search report)
• [Y] GB 2156430 A 19851009 - LUCAS IND PLC
• [Y] US 2591401 A 19520401 - GUNNAR CAMNER HILDING
• [A] DE 840477 C 19520603 - BOSCH GMBH ROBERT
• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 98 (M-375)(1821) 27 April 1985, & JP-A-59 221455 (MITSUBISHI JUKOGYO K.K.) 13 December 1984,

Cited by
EP1072785A3; EP1055814A3; EP0528226A1; EP0599320A1; EP0613523B1; EP1072787B2

Designated contracting state (EPC)
DE ES FR GB IT

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