

Title (en)
Pump assembly

Title (de)
Pumpenanordnung

Title (fr)
Ensemble de pompage

Publication
EP 1517039 A1 20050323 (EN)

Application
EP 03255911 A 20030922

Priority
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Abstract (en)
A pump assembly for use in a compression ignition engine has a pumping plunger (110) that is reciprocable within a plunger bore (126) to cause pressurisation of fuel within a pump chamber (130) defined at one end of the plunger bore (126). The plunger (110) has a main plunger body (114) with a high pressure end (122) and a low pressure end (120) and a drive stem (12) for cooperation with a cam drive to cause the plunger (110) the reciprocate, in use. A fuel collection volume (128) of the assembly communicates with a return path (132) for permitting leakage fuel from the pump chamber (130) to flow to low pressure. The plunger body (114) and the plunger bore (126) are shaped to define a first clearance between the high pressure end (122) of the main plunger body (114) and the plunger bore (126) and a second clearance between the low pressure end (120) of the main plunger body (114) and the plunger bore (126). <??>The first and second clearances have different sizes so that any distortion of the main plunger body (114) and/or of the plunger bore (126) can be accommodated. <??>The relative sizing of the clearances is selected so as to accommodate distortion at whichever of the high or low pressure ends it is focused. <IMAGE>

IPC 1-7
F04B 53/14; **F04B 53/16**; **F04B 53/04**; **F02M 59/44**; **F04B 53/00**

IPC 8 full level
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Citation (search report)
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