

Title (en)  
PUMP ASSEMBLY

Title (de)  
PUMPENANORDNUNG

Title (fr)  
ENSEMBLE DE POMPE

Publication  
**EP 1629191 A1 20060301 (EN)**

Application  
**EP 04734539 A 20040524**

Priority  
• GB 2004002235 W 20040524  
• GB 0311814 A 20030522

Abstract (en)  
[origin: WO2004104409A1] A pump assembly for use in delivering fuel to a common rail of an internal combustion engine, including a pumping plunger (28; 128) which is co-operable with an intermediate drive member in the form of a tappet (34). The tappet (34) is co-operable with an engine-drive cam (11), in use, so as to impart drive to the plunger (28; 128). A cam rider member (38) of generally tubular form has an inner surface which co-operates with the cam (11) and an outer surface which cooperates with the bucket tappet (34). A main pump housing (10) is provided with a radially extending opening (18a) within which is received, at a first end thereof, a separate pump head (20a) and, at a second end thereof, the tappet (34) so that the opening (18a) serves to guide axial movement of the tappet (34), in use. The separate pump head (20a) is provided with a plunger bore (26) which serves to guide movement of the plunger (28; 128) and within which is defined a pump chamber (30) in which fuel is pressurised as the plunger (28) is driven.

IPC 1-7  
**F02M 63/02**; **F02M 59/10**; **F04B 9/04**

IPC 8 full level  
**F04B 1/04** (2006.01); **F02M 59/10** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP US)  
**F02M 59/102** (2013.01 - EP US); **F02M 59/462** (2013.01 - EP US); **F02M 63/0075** (2013.01 - EP US); **F04B 1/0426** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US)

Citation (search report)  
See references of WO 2004104409A1

Cited by  
EP2113653A1; EP2278163A1; WO2011009839A1

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 PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004104409 A1 20041202**; EP 1629191 A1 20060301; EP 1629191 B1 20140423; ES 2466247 T3 20140609; GB 0311814 D0 20030625; JP 2007500312 A 20070111; US 2007041848 A1 20070222

DOCDB simple family (application)  
**GB 2004002235 W 20040524**; EP 04734539 A 20040524; ES 04734539 T 20040524; GB 0311814 A 20030522; JP 2006530536 A 20040524; US 55818004 A 20040524