

Title (en)

FUEL PUMP AND FUEL SUPPLY SYSTEM FOR AN INTERNAL COMBUSTION ENGINE OF A MOTOR VEHICLE EQUIPPED WITH A FUEL PUMP

Title (de)

KRAFTSTOFFPUMPE UND KRAFTSTOFFVERSORGUNGSANLAGE FÜR EINE BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGES MIT EINER KRAFTSTOFFPUMPE

Title (fr)

POMPE À CARBURANT ET SYSTÈME D'ALIMENTATION EN CARBURANT POURVU D'UNE POMPE À CARBURANT POUR LE MOTEUR À COMBUSTION INTERNE D'UN VÉHICULE À MOTEUR

Publication

EP 1805408 A1 20070711 (DE)

Application

EP 05796953 A 20050928

Priority

- EP 2005054884 W 20050928
- DE 102004052439 A 20041028

Abstract (en)

[origin: WO2006045686A1] The invention relates to a fuel pump for a motor vehicle, which is provided in the form of a side-channel pump and in which two partially ring-shaped channels (21, 22) that encircle concentrically to one another are interconnected by a connecting channel (29). Connections (33, 34) of the connecting channel (29) are placed upon the partially ring-shaped channels (21, 22) so that, at the nominal rotational speed of the fuel pump, the same pressure prevails. When the rotational speed falls below the nominal rotational speed, fuel exits from the radially outer partially ring-shaped channel (22) and enters the radially inner partially ring-shaped channel (21). This ensures a sufficient flow rate through the radially inner partially ring-shaped channel (21).

IPC 8 full level

F02M 37/04 (2006.01); **F02M 37/02** (2006.01); **F02M 37/10** (2006.01); **F04D 5/00** (2006.01)

CPC (source: EP KR US)

F02M 37/00 (2013.01 - KR); **F02M 37/025** (2013.01 - EP US); **F02M 37/04** (2013.01 - KR); **F02M 37/048** (2013.01 - EP US);
F02M 37/106 (2013.01 - EP US); **F04D 5/005** (2013.01 - EP US)

Citation (search report)

See references of WO 2006045686A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 102004052439 A1 20060504; CN 100420845 C 20080924; CN 1780978 A 20060531; DE 502005004477 D1 20080731;
EP 1805408 A1 20070711; EP 1805408 B1 20080618; ES 2308561 T3 20081201; JP 2008518140 A 20080529; JP 4235665 B2 20090311;
KR 100719646 B1 20070518; KR 20060055531 A 20060523; US 2008080964 A1 20080403; US 7658180 B2 20100209;
WO 2006045686 A1 20060504

DOCDB simple family (application)

DE 102004052439 A 20041028; CN 200580000680 A 20050928; DE 502005004477 T 20050928; EP 05796953 A 20050928;
EP 2005054884 W 20050928; ES 05796953 T 20050928; JP 2006511904 A 20050928; KR 20067002295 A 20060202; US 56765405 A 20050928