

Title (en)

ASSEMBLY FOR FEEDING FUEL FROM THE FUEL TANK OF A MOTOR VEHICLE TO ITS INTERNAL COMBUSTION ENGINE.

Title (de)

AGGREGAT ZUM FÖRDERN VON KRAFTSTOFF VOM VORRATSTANK ZUR BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGES.

Title (fr)

ORGANE POUR L'ALIMENTATION DU MOTEUR A COMBUSTION INTERNE D'UN VEHICULE A MOTEUR AVEC DU CARBURANT PROVENANT D'UN RESERVOIR.

Publication

**EP 0536159 B1 19940831**

Application

**EP 91909637 A 19910527**

Priority

- DE 4020520 A 19900628
- DE 9100449 W 19910527

Abstract (en)

[origin: WO9200449A1] The proposal is for an assembly for feeding fuel from the fuel tank (10) to the internal combustion engine (18) of a motor vehicle. The feed assembly (12) comprises a feed pump arranged in the fuel tank and taking the form of a full-flow pump whose substantially cylindrical rotary impeller (34) is arranged in a correspondingly cylindrical pump chamber (36) and where at least one approximately annular feed channel (50) grooved in cross-section extends in at least one of the two chamber front walls from a suction aperture (58) opening into the pump chamber to a pressure aperture (68) leading therefrom and this chamber front wall is pierced in the region of the pressure aperture by a drilling (70) connecting the pump chamber with a region of the system in which underpressure prevails. Particularly reliable removal of gas bubbles from the pump and hence from the feed path is obtained in a simple manner in that this drilling is in a sealing surface (64) radially limiting the feed channel in relation to the axis of rotation of the impeller.

IPC 1-7

**F02M 37/08**; **F02M 37/20**; **F04D 5/00**

IPC 8 full level

**F02M 37/04** (2006.01); **F02M 37/08** (2006.01); **F02M 37/10** (2006.01); **F02M 37/20** (2006.01); **F04D 5/00** (2006.01); **F04D 9/00** (2006.01); **F04D 9/02** (2006.01)

CPC (source: EP US)

**F02M 37/048** (2013.01 - EP US); **F02M 37/20** (2013.01 - EP US); **F04D 5/002** (2013.01 - EP US); **F04D 5/005** (2013.01 - EP US); **F04D 9/002** (2013.01 - EP US); **F04D 9/02** (2013.01 - EP US); **Y10S 417/01** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 9200449 A1 19920109**; DE 4020520 A1 19920102; DE 59102760 D1 19941006; EP 0536159 A1 19930414; EP 0536159 B1 19940831; JP 3027186 B2 20000327; JP H05508459 A 19931125; US 5338151 A 19940816

DOCDB simple family (application)

**DE 9100449 W 19910527**; DE 4020520 A 19900628; DE 59102760 T 19910527; EP 91909637 A 19910527; JP 50907791 A 19910527; US 95689492 A 19921228