

Title (en)  
PERIPHERAL PUMP, ESPECIALLY FOR FEEDING FUEL FROM A TANK TO THE INTERNAL COMBUSTION ENGINE OF A MOTOR VEHICLE.

Title (de)  
PERIPHERALPUMPE, INSBESONDERE ZUM FÖRDERN VON KRAFTSTOFF AUS EINEM VORRATSTANK ZUR BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGES.

Title (fr)  
POMPE TOURBILLONNAIRE SERVANT EN PARTICULIER A ALIMENTER UN MOTEUR A COMBUSTION INTERNE D'UN VEHICULE A MOTEUR AVEC UN CARBURANT CONTENU DANS UN RESERVOIR.

Publication  
**EP 0536154 B1 19940803**

Application  
**EP 91909498 A 19910527**

Priority  
• DE 4020521 A 19900628  
• DE 9100443 W 19910527

Abstract (en)  
[origin: WO9200457A1] The proposal is for a peripheral pump for feeding fuel from a tank to the internal combustion engine of a motor vehicle. The peripheral pump (12) comprises a cylindrical impeller (14) rotating in a pump chamber (19) having a ring of blades (38) arranged in the peripheral direction of the impeller and spaced apart on at least one of its frontal surfaces and, viewed in longitudinal cross-section through the pump, the base of the groove-like gap (42) between two neighbouring blades (38) forms a segment of a circle (46, 50), the centre (62, 64) of which is at least virtually identical with that of another segment of a circle (58, 60) formed by the base of an approximately annular feed channel (54, 56) which is arranged opposite the blade ring in a wall (20) of the pump chamber. A marked increase in the efficiency of the peripheral pump is obtained if the centres (62, 64) of the two segments of a circle (46, 58, 50, 60) lie within the contour of the impeller (14).

IPC 1-7  
**F04D 5/00**

IPC 8 full level  
**F02M 37/08** (2006.01); **F04D 5/00** (2006.01); **F04D 29/18** (2006.01)

CPC (source: EP US)  
**F04D 5/002** (2013.01 - EP US); **F04D 29/188** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 9200457 A1 19920109**; DE 4020521 A1 19920102; DE 59102451 D1 19940908; EP 0536154 A1 19930414; EP 0536154 B1 19940803; JP 2962828 B2 19991012; JP H05508460 A 19931125; US 5328325 A 19940712

DOCDB simple family (application)  
**DE 9100443 W 19910527**; DE 4020521 A 19900628; DE 59102451 T 19910527; EP 91909498 A 19910527; JP 50924691 A 19910527; US 96603492 A 19921224