

Title (en)

INTERNAL ROTOR GEAR OIL PUMP FOR INTERNAL-COMBUSTION ENGINES OF MOTOR VEHICLES

Publication

**EP 0161421 B1 19881221 (DE)**

Application

**EP 85103161 A 19850319**

Priority

DE 3410015 A 19840319

Abstract (en)

[origin: EP0161421A2] 1. Internal rotor gear oil pump for engines of motor vehicles and automatic motor vehicle gears with the following features :  
a) The pump housing (1), holding the hollow wheel (4) and pinion (6) of the pump in a working chamber (3), is able to be flanged to the front side of the engine or respectively gear and has a passage (18) for an extension of the crankshaft or respectively the pinion drive shaft, which penetrates and drives the pinion (6) which is arranged coaxially to the shaft ; b) In the housing (1) a supply channel (9) runs to a suction pocket (33) which is hollowed out in at least one of the two end walls of the working chamber (3) of the pump ; c) In the housing (1), in addition, a removal channel (28, 29) for the conveyed oil runs from the working chamber (3) to a corresponding connection ; d) In the construction as engine oil pump, the supply channel (9) runs at least in its part close to the working chamber approximately in a normal plane to the rotation axis of the pump, and the direction of flow in the supply channel (9) approximately tangentially to the central circumference direction of the pump gears (4, 6) in the region of the suction pocket ; e) An approximately crescent-shaped filler (50) fills the majority of the space lying opposite the site of deepest mesh of teeth between the crown lines of the gears (4, 6) characterized in that the suction pocket (33) in the direction of rotation of the pump extends to close to the plane (51) containing the two gear axes (O, O'), preferably beyond these.

IPC 1-7

**F04C 2/10**; **F01M 1/02**

IPC 8 full level

**F01M 1/02** (2006.01); **F04C 2/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)

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