Title (en)

FLOW PUMP FOR USE IN PUMPING FUEL FROM A RESERVOIR TO THE ENGINE OF A MOTOR VEHICLE

Title (de)

STRÖMUNGSPUMPE ZUM FÖRDERN VON KRAFTSTOFF AUS EINEM VORRATSBEHÄLTER ZUR BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGS

Title (fr)

POMPE A CIRCULATION DESTINEE A AMENER DU CARBURANT D'UN RESERVOIR AU MOTEUR A COMBUSTION INTERNE D'UN VEHICULE

Publication

EP 0774077 B2 20060405 (DE)

Application

EP 96900265 A 19960110

Priority

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Abstract (en)

[origin: US5807068A] PCT No. PCT/DE96/00024 Sec. 371 Date Aug. 21, 1996 Sec. 102(e) Date Aug. 21, 1996 PCT Filed Jan. 10, 1996 PCT Pub. No. WO96/24769 PCT Pub. Date Aug. 15, 1996The flow pump has an impeller (22), revolving in a pump chamber, which on each of its two axially oriented face ends (28, 29), has one ring of vanes (30) between which interstices (31) are located, and which cooperates with a feed channel (34) associated with the vanes (30) for pumping the fuel. When viewed in the radial direction relative to the rotary axis (24) of the impeller (22), the vanes (30) are positioned obliquely with respect to the rotary axis (24) in such a way that they lead ahead in the circumferential direction (21) of the impeller (22) toward the face end (28, 29) of the impeller (22). The vanes (30) and the rotary axis (24) of the impeller (22) form an angle (alpha) of between 25 DEG and 70 DEG that is oriented in the circumferential direction (21) of the impeller (22). Because of this obliquely positioned arrangement of the vanes (30), an improved inflow of the pumped fuel into the interstices (31) between the vanes (30) is effected, compared with an arrangement of vanes (30) that is parallel to the rotary axis (24), and as a result an increased feed pressure and improved efficiency of the flow pump are attained.

IPC 8 full level

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CPC (source: EP KR US)

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