

Title (en)

SIDE CANAL PUMP WITH A SIDE CANAL LOCATED IN THE SUCTION COVER IN ORDER TO AVOID IMPERFECT VORTEX STRUCTURES

Title (de)

SEITENKANALPUMPE MIT SEITENKANAL IM ANSAUGDECKEL ZUR VERMEIDUNG VERLUSTBEHAFTETER WIRBELSTRUKTUREN

Title (fr)

POMPE REGENERATIVE PRESENTANT UN CANAL LATERAL DANS LE COUVERCLE D'ASPIRATION POUR EVITER DES STRUCTURES TOURBILLONNAIRES A PERTES IMPORTANTES

Publication

**EP 0979354 A1 20000216 (DE)**

Application

**EP 98958154 A 19980923**

Priority

- DE 9802819 W 19980923
- DE 19757580 A 19971223

Abstract (en)

[origin: DE19757580A1] The invention relates to a side canal pump with a suction cover (10). The pump is used in a motor vehicle to deliver fuel. The suction cover (10) has a side canal (11) which runs radially around a rotation point (14) located in the suction cover (10), a first opening (13) for a suction canal (27) of the side canal (11), and a side canal width (BSK) which remains constant and which is located in a partial area running in a circumferential direction. The side canal (11) has a side canal width (BSK), said width remaining constant in the upper side (8), when seen from a beginning (12) of the side canal (11) with a starting value of a first angle ( $\phi$ ) ranging from 0 DEG , preferably of about 5 DEG , and no greater than 20 DEG , with regard to a line (LB) through the rotational axis (14) and through a contact point (1) located at the beginning (12). This results in an improved hot gasoline behavior, an increased efficiency, and a high pressure relationship of the side canal pump. The suction cover is especially suited for a double-flow side canal pump.

IPC 1-7

**F04D 5/00**

IPC 8 full level

**F04D 5/00** (2006.01)

CPC (source: EP KR US)

**F04B 5/00** (2013.01 - KR); **F04D 5/002** (2013.01 - EP US); **F04D 5/007** (2013.01 - EP US); **F05B 2250/503** (2013.01 - EP US)

Citation (search report)

See references of WO 9934117A1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**DE 19757580 A1 19990701**; BR 9807727 A 20000215; CN 1196864 C 20050413; CN 1248313 A 20000322; DE 59811692 D1 20040826; EP 0979354 A1 20000216; EP 0979354 B1 20040721; JP 2001513166 A 20010828; JP 4190588 B2 20081203; KR 100563392 B1 20060323; KR 20000070728 A 20001125; RU 2205984 C2 20030610; US 6287093 B1 20010911; WO 9934117 A1 19990708

DOCDB simple family (application)

**DE 19757580 A 19971223**; BR 9807727 A 19980923; CN 98802780 A 19980923; DE 59811692 T 19980923; DE 9802819 W 19980923; EP 98958154 A 19980923; JP 53436699 A 19980923; KR 19997006978 A 19990803; RU 99120096 A 19980923; US 36712199 A 19990806