

Title (en)
SIDE CHANNEL PUMP FOR CONVEYING FUEL IN A MOTOR VEHICLE

Title (de)
SEITENKANALPUMPE ZUR FÖRDERUNG VON KRAFTSTOFF IN EINEM KRAFTFAHRZEUG

Title (fr)
POMPE À CANAL LATÉRAL POUR REFOULER DU CARBURANT DANS UN VÉHICULE AUTOMOBILE

Publication
EP 2188531 A1 20100526 (DE)

Application
EP 08786127 A 20080714

Priority
• EP 2008059171 W 20080714
• DE 102007038144 A 20070813

Abstract (en)
[origin: WO2009021796A1] The invention relates to a side channel pump (2) for conveying fuel having a flow divider (20) disposed in an impeller (4). The flow divider (20) divides blade chambers (22) of the impeller (4) into individual partial chambers (11, 12). Flow dividers (21) are also disposed in housing parts (5, 6) opposing the impeller (4) having partial ring-shaped channels (15, 16) radially encompassing each other. The flow dividers (20, 21) in the impeller (4) and in the housing parts (5, 6) are at a distance from each other in order to allow cross flow between the conveyance chambers (9, 10) formed by the partial chambers (11, 12) and the partial ring-shaped channels (15, 16). The side channel pump (2) thereby has a high efficiency and particularly low radial dimensions.

IPC 8 full level
F04D 5/00 (2006.01)

CPC (source: EP US)
F04D 5/005 (2013.01 - EP US)

Citation (search report)
See references of WO 2009021796A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
DE 102007038144 A1 20090219; CN 101779042 A 20100714; CN 101779042 B 20130529; EP 2188531 A1 20100526; JP 2010535984 A 20101125; JP 5069352 B2 20121107; KR 20100051657 A 20100517; US 2012003083 A1 20120105; WO 2009021796 A1 20090219

DOCDB simple family (application)
DE 102007038144 A 20070813; CN 200880103144 A 20080714; EP 08786127 A 20080714; EP 2008059171 W 20080714; JP 2010520516 A 20080714; KR 20107003437 A 20080714; US 67310008 A 20080714