

Title (en)

COOLANT PUMP FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

KÜHLMITTELPUMPE FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)

POMPE À LIQUIDE DE REFROIDISSEMENT POUR UN MOTEUR À COMBUSTION INTERNE

Publication

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Appication

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Abstract (en)

[origin: WO2017076645A1] Coolant pumps for internal combustion engines having a drive shaft (18), having a coolant pump impeller (20) which is arranged at least rotationally conjointly on the drive shaft (18) and by means of which coolant can be delivered into a delivery duct (12) surrounding the coolant pump impeller (20), having an adjustable regulating slide (28) by means of which a throughflow cross section of a ring-shaped gap (30) between an outlet (32) of the coolant impeller (20) and the delivery duct (12) can be regulated, having a side channel pump (56) with a side channel pump impeller (46) which is arranged at least rotationally conjointly on the drive shaft (18), having a side channel (50) of the side channel pump (56), in which side channel a pressure can be generated as a result of rotation of the side channel pump impeller (46), having a pressure duct (72) via which an outlet (54) of the side channel (50) is fluidically connectable to a first pressure chamber (58) of the regulating slide (28), and having a valve (66) by means of which a throughflow cross section (70) of the pressure duct (72) can be closed and opened up, are known. To shorten the structural space thereof in particular axially, it is proposed that the coolant pump impeller (20) is formed in one piece with the side channel pump impeller (46), and the side channel (50) is formed in a first housing part (40) on which the regulating slide (28) is slidingly guided.

IPC 8 full level

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