

Title (en)
VARIABLE COOLANT PUMPS

Title (de)
VARIABLE KÜHLMITTELPUMPEN

Title (fr)
POMPES DE REFROIDISSEMENT VARIABLE

Publication
EP 4067665 A1 20221005 (EN)

Application
EP 21382270 A 20210331

Priority
EP 21382270 A 20210331

Abstract (en)
A variable coolant pump is provided. The pump comprising: a housing comprising an impeller area and a driving area, wherein the housing has a locking plate to define the impeller area; a shaft connected to a driving element arranged in the driving area; a main impeller to drive coolant in the impeller area; a shutter to cover an outflow region of the main impeller such that an amount of the coolant delivered by the pump is variable; a control pressure pump to increase hydraulic pressure to displace the shutter; a first fluid path to feed the control pressure pump with coolant from the impeller area; a collector to collect driven coolant in a region between the main impeller and the locking plate, wherein the collector is in fluid communication with the first fluid path.

IPC 8 full level
F04D 13/12 (2006.01); **F04D 15/00** (2006.01)

CPC (source: EP)
F04D 13/12 (2013.01); **F04D 15/0038** (2013.01); **F05D 2270/64** (2013.01)

Citation (applicant)
DE 102008026218 B4 20120419 - GERAETE UND PUMPENBAU GMBH DR EUGEN SCHMIDT [DE]

Citation (search report)
• [XAI] EP 2698541 A2 20140219 - SHW AUTOMOTIVE GMBH [DE]
• [XAI] EP 3290713 A1 20180307 - PIERBURG GMBH [DE], et al
• [XAI] DE 102013222828 A1 20150528 - SCHAEFFLER TECHNOLOGIES AG [DE]
• [XAI] DE 102013111939 B3 20141030 - PIERBURG GMBH [DE]
• [XAI] DE 102011018240 A1 20111124 - TCG UNITECH SYSTEMTECHNIK GMBH [AT]

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

Designated extension state (EPC)
BA ME

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