

Title (en)
COOLING PUMP WITH STRUCTURE OPTIMIZED FOR THE APPLICATION

Title (de)
KÜHLMITTELPUMPE MIT ANWENDUNGSOPTIMISIERTEM AUFBAU

Title (fr)
POMPE DE REFROIDISSEMENT OPTIMISÉ SELON L'UTILISATION

Publication
EP 3676484 B1 20230816 (DE)

Application
EP 18740181 A 20180710

Priority
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• EP 2018068616 W 20180710

Abstract (en)
[origin: WO2019042638A1] The invention relates to an electric coolant pump, preferably for use as a supplementary water pump in a vehicle, characterized in that a radial mounting of the shaft (4) is provided by means of a coolant-lubricated radial sliding bearing (41), which is arranged between the pump impeller (2) and the rotor (32); a dry-running electric motor (3) with a radially inner stator (31) and a radially outer rotor (32) is accommodated in a motor chamber (13) separated from the pump chamber (10); a shaft seal (5) is arranged between the radial sliding bearing (41) and the motor chamber (13); the rotor (32) is in the shape of a bell, the inner surface of which facing the shaft seal (5) and being fixed to the shaft seal (5) so as to axially overlap with the shaft (4); and the motor chamber (13) has an opening to the atmosphere, which is closed by a liquid-tight pressure equalisation membrane (6) that is permeable to vapour.

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Citation (examination)
• DE 10012662 B4 20101104 - GERAETE & PUMPENBAU GMBH [DE]
• WO 2015121052 A1 20150820 - PIERBURG PUMP TECHNOLOGY GMBH [DE]

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