

Title (en)
Cooling system and vehicle

Title (de)
Kühlvorrichtung und Fahrzeug

Title (fr)
Installation de refroidissement et véhicule

Publication
EP 1726801 A1 20061129 (DE)

Application
EP 06009495 A 20060509

Priority
DE 102005023629 A 20050521

Abstract (en)
The cooling device for especially an internal combustion engine with a motor-driven fan (14,15), has a hydraulic circuit formed from a hydraulic pump (28) and a hydraulic motor (20, 22), and the fan is driven by the hydraulic motor and the hydraulic pump is driven by the electric motor (26). The electric motor, the hydraulic pump, the hydraulic motor and the fan are modularly assembled in a cooling module. A control unit is provided for control of the RPM of the electric motor. An independent claim is included for a vehicle, especially a rail vehicle.

IPC 8 full level
F01P 5/04 (2006.01)

CPC (source: EP)
F01P 5/04 (2013.01); **F04D 25/04** (2013.01); **F04D 29/582** (2013.01); **F01P 7/044** (2013.01); **F01P 7/048** (2013.01); **F01P 11/10** (2013.01); **F01P 2003/182** (2013.01); **F01P 2005/025** (2013.01)

Citation (search report)

- [XA] DE 3636484 A1 19880428 - BOSCH GMBH ROBERT [DE]
- [X] US 5950431 A 19990914 - OOGUSHI NAOKI [JP]
- [X] DE 4316339 A1 19941117 - TEVES GMBH ALFRED [DE]
- [A] CH 323708 A 19570815 - SUEDEDEUTSCHE KUEHLER BEHR [DE]
- [A] EP 0916819 A2 19990519 - GEN MOTORS CORP [US]

Cited by
CN103967583A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1726801 A1 20061129; DE 102005023629 A1 20061123

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