

Title (en)
Cooling system for vehicle

Title (de)
Kühlsystem für Fahrzeug

Title (fr)
Système de refroidissement pour véhicule

Publication
EP 1069290 A3 20030102 (DE)

Application
EP 00114597 A 20000707

Priority
US 35404599 A 19990715

Abstract (en)
[origin: US6126079A] A fan control system for a vehicle cooling system includes forward and reverse relays connected to a microprocessor based timer control. A third relay is controlled by a single temperature responsive switch or thermostat and selects either the high speed or low speed winding of an electric radiator fan or similar engine cooling device dependent on the temperature sensed by the thermostat. The thermostat also provides an input to the timer control to adjust or interrupt preselected timing functions for certain fan conditions. Upon start-up of the engine, the control initiates a first delay period during which the fan is maintained in the off condition regardless of the temperature of the coolant. After the initial delay, a second and longer delay period is initiated to maintain the fan in the off condition provided the sensed temperature remains below a preselected level.

IPC 1-7
F01P 7/04; **F01P 5/04**

IPC 8 full level
F01P 5/04 (2006.01); **F01P 7/04** (2006.01); **F01P 11/06** (2006.01)

CPC (source: EP US)
F01P 5/043 (2013.01 - EP US); **F01P 7/048** (2013.01 - EP US); **F01P 2011/063** (2013.01 - EP US); **F01P 2025/08** (2013.01 - EP US)

Citation (search report)

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- [A] EP 0323212 A2 19890705 - HONDA MOTOR CO LTD [JP]
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- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06 30 June 1997 (1997-06-30)

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CN110107391A; US9677781B2; WO2014108479A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
US 6126079 A 20001003; AU 4266700 A 20010118; AU 765321 B2 20030918; CA 2298197 A1 20010115; CA 2298197 C 20020716; DE 50013450 D1 20061026; EP 1069290 A2 20010117; EP 1069290 A3 20030102; EP 1069290 B1 20060913

DOCDB simple family (application)
US 35404599 A 19990715; AU 4266700 A 20000626; CA 2298197 A 20000208; DE 50013450 T 20000707; EP 00114597 A 20000707