

Title (en)

COOLING DEVICE FOR A VEHICLE COMBUSTION MOTOR

Title (de)

KÜHLVORRICHTUNG FÜR DEN VERBRENNUNGSMOTOR EINES KRAFTFAHRZEUGES

Title (fr)

DISPOSITIF DE REFROIDISSEMENT POUR MOTEUR A COMBUSTION INTERNE D'UN VEHICULE

Publication

EP 0979349 B1 20020703 (DE)

Application

EP 98916625 A 19980430

Priority

- AT 9800114 W 19980430
- DE 19718704 A 19970502

Abstract (en)

[origin: US6196169B1] A cooling apparatus for the internal combustion engine of a motor vehicle includes a cooling-air fan (10), a radiator assembly (2) and a fan shroud (18) which extends from a fan ring (9), enclosing the cooling-air fan, as far as the radiator assembly. In order, with given dimensioning of the radiator assembly (2) and cooling-air fan (10), to increase the cooling capacity, the fan shroud (18) forms, in the part (12) which projects laterally beyond the projection of the cooling-air fan (10), a vertical flow duct (23) and, in the part (11) which projects beyond the radiator assembly (2), a collecting chamber (22) which is in flow connection with the vertical flow duct (23).

IPC 1-7

F01P 11/10; F04D 19/00

IPC 8 full level

F01P 11/10 (2006.01); **F04D 19/00** (2006.01)

CPC (source: EP US)

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Cited by

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US 6196169 B1 20010306; AT E220174 T1 20020715; AU 7012998 A 19981127; AU 738064 B2 20010906; DE 19718704 A1 19981105; DE 59804677 D1 20020808; EP 0979349 A1 20000216; EP 0979349 B1 20020703; ES 2182293 T3 20030301; JP 2001523316 A 20011120; WO 9850689 A1 19981112

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US 42309899 A 19991101; AT 9800114 W 19980430; AT 98916625 T 19980430; AU 7012998 A 19980430; DE 19718704 A 19970502; DE 59804677 T 19980430; EP 98916625 A 19980430; ES 98916625 T 19980430; JP 54752798 A 19980430