

Title (en)

COOLANT PUMP ARRANGEMENT FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

KÜHLMITTELPUMPENANORDNUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)

SYSTEME DE POMPE A LIQUIDE DE REFROIDISSEMENT DESTINE A UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1709307 A1 20061011 (DE)

Application

EP 04803697 A 20041209

Priority

- EP 2004014043 W 20041209
- DE 102004004050 A 20040127

Abstract (en)

[origin: WO2005071237A1] Disclosed is a coolant pump arrangement (100, 200) for an internal combustion engine of a motor vehicle, which comprises engine shafts. Said coolant pump arrangement encompasses a pump housing and a pump shaft (206), one end of which is provided with a pump impeller (218). The pump shaft (206) is essentially cantilevered by means of a bearing (220) that is disposed inside the internal combustion engine.

IPC 8 full level

F01P 5/12 (2006.01)

CPC (source: EP US)

F01P 5/12 (2013.01 - EP US)

Citation (search report)

See references of WO 2005071237A1

Designated contracting state (EPC)

AT DE ES FR GB IT

DOCDB simple family (publication)

WO 2005071237 A1 20050804; AT E530748 T1 20111115; DE 102004004050 A1 20050811; EP 1709307 A1 20061011; EP 1709307 B1 20111026; ES 2372937 T3 20120127; JP 2007519850 A 20070719; JP 4747105 B2 20110817; US 2006254539 A1 20061116; US 7343883 B2 20080318

DOCDB simple family (application)

EP 2004014043 W 20041209; AT 04803697 T 20041209; DE 102004004050 A 20040127; EP 04803697 A 20041209; ES 04803697 T 20041209; JP 2006549905 A 20041209; US 49277406 A 20060726