

Title (en)

COOLING PUMP FOR A MOTOR VEHICLE INTERNAL-COMBUSTION ENGINE

Publication

EP 0240777 A3 19890111 (DE)

Application

EP 87103793 A 19870316

Priority

DE 3611708 A 19860408

Abstract (en)

[origin: EP0240777A2] A coolant pump for a motor vehicle combustion engine has an impeller 3 fitted with radial blades 15 and accommodated in a housing 1, the impeller being connected by means of a thread 7, 8 to the drive shaft 4 so that it can rotate and be displaced axially relative to the latter. Between the impeller 3 and the drive shaft 4 is a torsion spring 9 which counteracts any rotation of the impeller 3 relative to the drive shaft 4 up to a specific drive torque. Should the drive torque exceed this value due to an increase in the speed, the impeller 3 can rotate in relation to the drive shaft 4 and is axially displaced by virtue of the thread 7, 8, the gap S between the radial blades 15 and the pump housing wall 18 being increased and the delivery reduced relative to the speed. This results in a proportionally high delivery at low speeds and a proportionally low delivery at high speeds. <IMAGE>

IPC 1-7

F04D 15/00

IPC 8 full level

F01P 5/10 (2006.01); **F04D 15/00** (2006.01); **F04D 29/20** (2006.01)

CPC (source: EP)

F01P 5/10 (2013.01); **F04D 15/0033** (2013.01); **F04D 29/042** (2013.01); **F04D 29/20** (2013.01)

Citation (search report)

- [A] DE 759331 C 19540222 - AUDI AG
- [A] DE 1274447 B 19680801 - EDWIN FRANK
- [A] US 1955549 A 19340417 - JANETTE JOHN T
- [AD] DE 3329002 C2 19850822

Cited by

FR2827920A1; DE10142263C1; DE102008006451B4; DE102005028598B3; FR2704278A1; FR2681906A1; WO9102659A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0240777 A2 19871014; EP 0240777 A3 19890111; DE 3611708 A1 19871022

DOCDB simple family (application)

EP 87103793 A 19870316; DE 3611708 A 19860408