

Title (en)
Cooling device

Title (de)
Kühlleinrichtung

Title (fr)
Dispositif frigorifique

Publication
EP 2175221 A3 20111214 (DE)

Application
EP 09170901 A 20090922

Priority
DE 102008051268 A 20081010

Abstract (en)

[origin: EP2175221A2] The system (1) has a pressure die-casting housing, and a heat transmission device (4) provided in a channel (3). The housing has another channel (6) formed by housing contours (5, 5'), where the latter channel is designed as a bypass channel and bypasses the heat transmission device. A pivotable bypass flap (7) causes a flow division between the channels. Cooling contours e.g. cooling ribs, are formed on both parts of the housing, and engage with one another when the housing is in an assembled state. The housing is formed as an aluminum, magnesium or zinc pressure die-cast housing.

IPC 8 full level

F28D 9/00 (2006.01); **F02M 25/07** (2006.01); **F28F 3/02** (2006.01); **F28F 3/04** (2006.01); **F28F 21/08** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP US)

F02M 26/25 (2016.02 - EP US); **F02M 26/32** (2016.02 - EP US); **F28D 9/0031** (2013.01 - EP US); **F28F 3/022** (2013.01 - EP US);
F28F 3/048 (2013.01 - EP US); **F28F 21/081** (2013.01 - EP US); **F28F 21/084** (2013.01 - EP US); **F28F 27/02** (2013.01 - EP US);
F28D 21/0003 (2013.01 - EP US); **F28F 2215/06** (2013.01 - EP US); **F28F 2255/14** (2013.01 - EP US)

Citation (search report)

- [Y] FR 2907886 A1 20080502 - VALEO SYS CONTROLE MOTEUR SAS [FR]
- [YD] DE 102005045103 B3 20061228 - PIERBURG GMBH [DE]

Cited by

EP3146818A4; EP2405222A3; US9341146B2; US10178805B2; EP2476986A1; CN102589317A; WO2012126654A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2175221 A2 20100414; EP 2175221 A3 20111214; EP 2175221 B1 20130220; DE 102008051268 A1 20100415;
US 2010089043 A1 20100415

DOCDB simple family (application)

EP 09170901 A 20090922; DE 102008051268 A 20081010; US 57674709 A 20091009