

Title (en)

FAIL-SAFE ROTARY ACTUATOR FOR A COOLANT CIRCUIT

Title (de)

AUSFALLSICHERER DREHSTELLER FÜR EINEN KÜHLMITTELKREISLAUF

Title (fr)

ACTIONNEUR ROTATIF À SÛRETÉ INTÉGRÉE POUR UN CIRCUIT DE LIQUIDE DE REFROIDISSEMENT

Publication

**EP 2427639 A2 20120314 (DE)**

Application

**EP 10724688 A 20100504**

Priority

- EP 2010002715 W 20100504
- DE 102009020186 A 20090506

Abstract (en)

[origin: WO2010127825A2] The invention relates to a fail-safe rotary actuator (1) for a coolant circuit, particularly for a coolant circuit of an internal combustion engine (2) comprising a plurality of partial circuits (3) and (4), having a coolant delivery pump (5) for circulating the coolant within the coolant circuit, and having a rotary vane housing (8) comprising a plurality of housing pass-through openings (6) and (7), in which at least one rotary vane (9) having at least one rotary vane pass-through opening (11) and (12) is rotationally supported, wherein the housing pass-through openings (6) and/or (7) are fluidically connected to at least one partial circuit (3) and/or (4), and can be brought into at least partial interference with the rotary vane pass-through openings (11) and/or (12) by a rotary motion of the rotary vane (9), wherein a thermostat valve (13) opens a flow path running parallel to the rotary vane (9) from one of the partial circuits (3) or (4) to the coolant delivery pump (5) when a temperature limit of the coolant is exceeded.

IPC 8 full level

**F01P 7/16** (2006.01)

CPC (source: EP KR US)

**F01P 7/16** (2013.01 - KR); **F01P 7/161** (2013.01 - EP US); **F04D 15/00** (2013.01 - KR); **F04D 15/0022** (2013.01 - EP US); **F01P 7/16** (2013.01 - US); **F01P 7/165** (2013.01 - US); **F01P 2005/105** (2013.01 - US); **F01P 2007/146** (2013.01 - US); **F01P 2025/32** (2013.01 - US); **F01P 2031/00** (2013.01 - US)

Citation (search report)

See references of WO 2010127825A2

Designated contracting state (EPC)

AL 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

DOCDB simple family (publication)

**WO 2010127825 A2 20101111**; **WO 2010127825 A3 20110106**; CN 102414416 A 20120411; CN 102414416 B 20131211; DE 102009020186 A1 20110120; DE 102009020186 B4 20110714; EP 2427639 A2 20120314; EP 2427639 B1 20130116; JP 2012519800 A 20120830; JP 5355723 B2 20131127; KR 101448338 B1 20141007; KR 20120027115 A 20120321; US 2012055652 A1 20120308; US 9115634 B2 20150825

DOCDB simple family (application)

**EP 2010002715 W 20100504**; CN 201080019826 A 20100504; DE 102009020186 A 20090506; EP 10724688 A 20100504; JP 2011553366 A 20100504; KR 20117020946 A 20100504; US 201013318854 A 20100504