

Title (en)
COOLING APPARATUS

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE REFROIDISSEMENT

Publication
EP 3114333 A1 20170111 (DE)

Application
EP 15707990 A 20150306

Priority

- DE 102014204257 A 20140307
- EP 2015054723 W 20150306

Abstract (en)
[origin: WO2015132383A1] The invention relates to a cooling apparatus for a first heat source and a second heat source, comprising a radiator and at least one first coolant pump, a coolant line interconnection being provided between the first heat source, the second heat source and the radiator, a thermostat arrangement with at least two thermostatic valves being provided in the coolant line interconnection to achieve a graded temperature distribution of the coolant.

IPC 8 full level
F01P 7/16 (2006.01)

CPC (source: EP)
F01P 3/20 (2013.01); **F01P 7/165** (2013.01); **F01N 5/02** (2013.01); **F01P 2005/105** (2013.01); **F01P 2060/14** (2013.01); **F01P 2060/16** (2013.01);
F02G 5/02 (2013.01); **Y02T 10/12** (2013.01)

Citation (search report)
See references of WO 2015132383A1

Citation (examination)

- US 2013118423 A1 20130516 - LUTZ RAINER [DE], et al
- US 2012198840 A1 20120809 - STEGMAIER JUERGEN [DE], et al
- US 4964371 A 19901023 - MAEDA TOSHIMASA [JP], et al
- US 4337733 A 19820706 - HIRATA MAKIZO, et al
- JP 2012026279 A 20120209 - TOYOTA MOTOR CORP
- JP 2008082234 A 20080410 - TOYOTA MOTOR CORP

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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102014204257 A1 20150910; EP 3114333 A1 20170111; WO 2015132383 A1 20150911

DOCDB simple family (application)
DE 102014204257 A 20140307; EP 15707990 A 20150306; EP 2015054723 W 20150306