

Title (en)
ELECTRICALLY HEATED MAP CONTROLLED THERMOSTAT BY A PTC HEATING ELEMENT APPLICATION

Title (de)
ELEKTRISCH BEHEIZTER UND KENNFELDGESTEUERTER THERMOSTAT ANHAND EINER PTC-HEIZELEMENTANWENDUNG

Title (fr)
THERMOSTAT CHAUFFÉ ÉLECTRIQUEMENT ET COMMANDÉ PAR UN PLAN PAR APPLICATION D'UN ÉLÉMENT CHAUFFANT PTC

Publication
EP 2630351 A1 20130828 (EN)

Application
EP 10787589 A 20101022

Priority
TR 2010000211 W 20101022

Abstract (en)
[origin: WO2012053995A1] This invention relates to a thermostat electrically heated and map controlled, which uses a PTC heating element placed in its piston, to keep temperature of coolant circulated inside cooling systems of internal combustion engines in a defined range, managing opening and closing moves of thermostatic valve. It comprises an assembling as PTC heater element is placed inside edge of its Piston to utilise the heat it produces efficiently and to ensure quick heat transfer on wax compound.

IPC 8 full level
F01P 7/16 (2006.01)

CPC (source: EP)
F01P 7/16 (2013.01); **G05D 23/303** (2013.01)

Citation (search report)
See references of WO 2012053995A1

Citation (examination)
EP 1545158 A2 20050622 - WAHLER GMBH & CO KG GUSTAV [DE]

Citation (third parties)
Third party :
EP 1545158 A2 20050622 - WAHLER GMBH & CO KG GUSTAV [DE]

Cited by
WO2020070414A1; FR3086989A1; US2021388753A1; US11952933B2

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

DOCDB simple family (publication)
WO 2012053995 A1 20120426; BR 112013009766 A2 20160719; CN 103228886 A 20130731; DE 112010004686 T5 20120920;
EP 2630351 A1 20130828

DOCDB simple family (application)
TR 2010000211 W 20101022; BR 112013009766 A 20101022; CN 201080070388 A 20101022; DE 112010004686 T 20101022;
EP 10787589 A 20101022