

Title (en)
ESTIMATING THE THERMAL CONDITION OF AN ENGINE

Title (de)
SCHÄTZUNG DES WÄRMEZUSTANDES EINES MOTORS

Title (fr)
ESTIMATION DE L'ETAT THERMIQUE D'UN MOTEUR

Publication
EP 2834490 B1 20170503 (FR)

Application
EP 13715353 A 20130320

Priority
• FR 1253063 A 20120404
• FR 2013050594 W 20130320

Abstract (en)
[origin: WO2013150207A1] A cooling circuit for a vehicle engine notably comprises a possibility for adjusting, under the control of a control device, the rate at which a coolant circulates in this circuit. The control device, in successive iterations, makes N estimates of the temperature at N engine temperature nodes, supplemented by an (N + 1)- th estimate of the temperature of the coolant. These (N+1) estimates are made on the basis of M input signals which are associated with M engine operating parameters and from the (N+1) estimates made earlier. To correct the estimates, the control device comprises a comparison module (23) comparing the estimated temperature of the coolant against an actual measurement of this temperature, and a first correction stage (24, 25) for correcting the (N+1) estimates, possibly supplemented by a second correction stage (31, 32, 33, 34) for correcting the M input signals.

IPC 8 full level
F01P 7/16 (2006.01)

CPC (source: EP)
F01P 7/162 (2013.01); **F01P 7/164** (2013.01); **F01P 2037/02** (2013.01)

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 2013150207 A1 20131010; EP 2834490 A1 20150211; EP 2834490 B1 20170503; FR 2989112 A1 20131011; FR 2989112 B1 20140425

DOCDB simple family (application)
FR 2013050594 W 20130320; EP 13715353 A 20130320; FR 1253063 A 20120404