

Title (en)
Method and apparatus for adjusting the idling speed of a combustion engine

Title (de)
Verfahren und Vorrichtung zur Leerlaufeinstellung einer Brennkraftmaschine

Title (fr)
Méthode et dispositif pour ajuster le ralenti d'un moteur à combustion

Publication
EP 0702137 B1 20011219 (DE)

Application
EP 95112418 A 19950808

Priority
DE 4433300 A 19940919

Abstract (en)
[origin: JPH08114145A] PROBLEM TO BE SOLVED: To control the idling of internal combustion engines always appropriately by correctively increasing the engine idling speed when a hot engine operation state has been established from the oil temperature found above an oil temperature threshold value. SOLUTION: A control unit 10 for controlling an operating element 14 for adjusting idling air passes the signals measuring devices 26, 30 and 34 output after detecting the engine temperature, intake air temperature and engine speed into a target value forming unit 36 and a plurality of threshold stages 48, 50, 52, 54, 56, 58, 72 and 74. The output of an AND gate 82 and an OR gate 96 receiving as inputs the output signals of the threshold stages 48, 50, 52, 54, 56, 58, 72 and 74 changes over a switch 40 via an FF 88 to increase the engine idling speed correctively. A hot engine state, when the idling speed is in that way increased, is present when the engine temperature and intake air temperature have exceeded predetermined threshold values and the engine speed has been above a limit speed, all triggering a lower oil pressure.

IPC 1-7
F02D 41/08

IPC 8 full level
F01M 1/20 (2006.01); **F02D 41/08** (2006.01); **F02D 41/16** (2006.01); **F02D 45/00** (2006.01)

CPC (source: EP US)
F02D 41/086 (2013.01 - EP US)

Designated contracting state (EPC)
ES FR IT

DOCDB simple family (publication)
DE 4433300 C1 19951109; EP 0702137 A2 19960320; EP 0702137 A3 19980916; EP 0702137 B1 20011219; ES 2170113 T3 20020801; JP H08114145 A 19960507; US 5605128 A 19970225

DOCDB simple family (application)
DE 4433300 A 19940919; EP 95112418 A 19950808; ES 95112418 T 19950808; JP 24013395 A 19950919; US 47877395 A 19950607