

Title (en)
CONTROLLER, COMPUTER PROGRAM AND STATE MACHINE IN A CONTROLLER FOR OPERATING AN INTERNAL COMBUSTION ENGINE

Title (de)
STEUERGERÄT, COMPUTERPROGRAMM UND ZUSTANDSAUTOMAT IN EINEM STEUERGERÄT ZUM BETREIBEN EINER
BRENNKRAFTMASCHINE

Title (fr)
APPAREIL DE COMMANDE, PROGRAMME INFORMATIQUE ET AUTOMATE D'ETAT DANS UN APPAREIL DE COMMANDE POUR FAIRE
FONCTIONNER UN MOTEUR A COMBUSTION INTERNE

Publication
EP 1597469 B1 20120801 (DE)

Application
EP 04712567 A 20040219

Priority
• EP 2004050166 W 20040219
• DE 10308459 A 20030221

Abstract (en)
[origin: WO2004074665A1] The invention relates to a method for controlling an internal combustion engine (20) of a certain model in accordance with a finite state machine (12). According to known methods, a possible operating state of the internal combustion engine is first adjusted which is associated with a level n of the finite state machine. In a further level (n+1), subordinate operating states relative to the operating state previously determined are specified by the known method. The aim of the invention is to streamline and simplify methods of the aforementioned type so that they can be adapted to control different models of internal combustion engines. For this purpose, the method and the finite state machine are designed in such a manner that the finite state machine comprises at least two groups of levels, the first group representing levels of operating states which the internal combustion engine of a certain model shares with internal combustion engines of a different model, and the second group of levels representing operating states which are specific for the internal combustion engine of a certain model.

IPC 8 full level
F02D 41/24 (2006.01); **F02D 41/26** (2006.01)

CPC (source: EP KR US)
F02D 41/24 (2013.01 - KR); **F02D 41/2425** (2013.01 - EP US); **F02D 41/26** (2013.01 - EP KR US); **F02D 41/263** (2013.01 - EP US);
F02D 2041/1411 (2013.01 - EP US)

Citation (examination)
HAREL D: "STATECHARTS: A VISUAL FORMALISM FOR COMPLEX SYSTEMS", SCIENCE OF COMPUTER PROGRAMMING, ELSEVIER BV, NL, vol. 8, no. 3, 1 June 1987 (1987-06-01), pages 231 - 274, XP001191242, ISSN: 0167-6423, DOI: 10.1016/0167-6423(87)90035-9

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 10308459 A1 20040902; CN 100400835 C 20080709; CN 1754039 A 20060329; EP 1597469 A1 20051123; EP 1597469 B1 20120801; JP 2006519951 A 20060831; JP 4489754 B2 20100623; KR 101033079 B1 20110506; KR 20050103231 A 20051027; US 2007106452 A1 20070510; US 7337060 B2 20080226; WO 2004074665 A1 20040902

DOCDB simple family (application)
DE 10308459 A 20030221; CN 200480004879 A 20040219; EP 04712567 A 20040219; EP 2004050166 W 20040219; JP 2006500116 A 20040219; KR 20057015280 A 20040219; US 54512704 A 20040219