

Title (en)

METHOD FOR AUTOMATICALLY GENERATING SMOOTHED CHARACTERISTIC DIAGRAMS FOR AN ELECTRONIC ENGINE CONTROL OF AN INTERNAL COMBUSTION PISTON ENGINE

Title (de)

VERFAHREN ZUR AUTOMATISCHEN ERSTELLUNG VON GEGLÄTTETEN KENNFELDERN FÜR EINE ELEKTRONISCHE MOTORSTEUERUNG EINER KOLBENBRENNKRAFTMASCHINE

Title (fr)

PROCEDE D'ETABLISSEMENT AUTOMATIQUE DE RESEAUX DE CARACTERISTIQUES LISSES POUR UNE COMMANDE ELECTRONIQUE D'UN MOTEUR A COMBUSTION INTERNE A PISTONS

Publication

EP 1076764 B1 20040114 (DE)

Application

EP 00907623 A 20000225

Priority

- DE 19910035 A 19990308
- EP 0001545 W 20000225

Abstract (en)

[origin: US6425374B1] The invention relates to a method for automatically generating smoothed characteristic diagrams for electronic engine controls of internal combustion piston engines. The invention is characterized in that the adjustment variable combination of the individual successive operating points are input by means of a motor control to a reference internal combustion piston engine by entering specified values of the boundary conditions for the operation of an internal combustion piston engine. According to the invention, the reference internal combustion piston engine is operated in this operating point, and the actual values and/or boundary conditions occurring during the same are acquired and compared with the specified values of the boundary conditions in an optimization system assigned to the engine control and, in the instance of variations, the adjustment variable combinations are optimally altered in a progressive manner by the optimization system. A quality function for the respective alteration of the adjustment variable combination is predetermined in the optimization system, and the quality function is corrected while taking into account already established values of the adjustment variable combination of at least one adjacent operating point.

IPC 1-7

F02D 41/14; F02D 41/26

IPC 8 full level

F02D 41/14 (2006.01); **F02D 41/26** (2006.01); **G01M 15/00** (2006.01)

CPC (source: EP US)

F02D 41/2432 (2013.01 - EP US); **F02D 41/1406** (2013.01 - EP US)

Cited by

DE102009021781A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6425374 B1 20020730; AT E257905 T1 20040115; DE 19910035 A1 20000914; DE 50005008 D1 20040219; EP 1076764 A1 20010221; EP 1076764 B1 20040114; WO 0053911 A1 20000914

DOCDB simple family (application)

US 67492601 A 20010130; AT 00907623 T 20000225; DE 19910035 A 19990308; DE 50005008 T 20000225; EP 0001545 W 20000225; EP 00907623 A 20000225