

Title (en)  
METHOD AND SYSTEM FOR CONTINUOUSLY CONTROLLING AN INTERNAL COMBUSTION ENGINE ON AN ENGINE BENCH TESTING UNIT

Title (de)  
VERFAHREN UND SYSTEM ZUR KONTINUIERLICHEN STEUERUNG EINES VERBRENNUNGSMOTORS EINER MOTORPRÜFSTANDEINHEIT

Title (fr)  
PROCEDE ET SYSTEME POUR LE PILOTAGE CONTINU DE MOTEUR A COMBUSTION INTERNE SUR BANC D'ESSAIS MOTEUR

Publication  
**EP 1756542 A1 20070228 (FR)**

Application  
**EP 05771009 A 20050504**

Priority  
• FR 2005001173 W 20050504  
• FR 0405010 A 20040507

Abstract (en)  
[origin: WO2005116605A1] The invention relates to a system and method for continuously controlling an internal combustion engine (3), wherein said system comprises at least one actuator connected to an engine operating member, an electronic card (3) comprising an FPGA programmable logic component, means (9, 10) for synchronising the card according to the engine cycle and a central processing unit (CPU). The inventive method consists in generating a plurality of the actuator control pulses by the component, wherein said pulses are phase and run-time parametrisable, independent, assigned to the same cylinder and synchronised by an angular reference point in the engine cycle for each cylinder, in determining the pulse parameters and in assigning the parameters of said pulses to each physical output by a computation program included into the microcomputer CPU and in controlling at least one actuator by the logic output signal of the card corresponding to at least one control pulse.

IPC 8 full level  
**G01M 15/00** (2006.01); **F02D 41/24** (2006.01); **F02D 43/04** (2006.01); **F02M 65/00** (2006.01); **F02P 17/02** (2006.01); **G01M 15/06** (2006.01)

CPC (source: EP KR US)  
**F02D 41/24** (2013.01 - KR); **F02M 65/00** (2013.01 - KR); **F02P 17/02** (2013.01 - KR); **G01M 15/00** (2013.01 - KR); **G01M 15/06** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005116605A1

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

DOCDB simple family (publication)  
**WO 2005116605 A1 20051208**; CA 2565076 A1 20051208; EP 1756542 A1 20070228; FR 2869991 A1 20051111; FR 2869991 B1 20060623; JP 2007536548 A 20071213; JP 4709832 B2 20110629; KR 20070014193 A 20070131; US 2008009998 A1 20080110; US 7653476 B2 20100126

DOCDB simple family (application)  
**FR 2005001173 W 20050504**; CA 2565076 A 20050504; EP 05771009 A 20050504; FR 0405010 A 20040507; JP 2007512285 A 20050504; KR 20067025679 A 20061206; US 57958605 A 20050504