

Title (en)

Engine control unit including phase advance compensator

Title (de)

Steuereinrichtung mit Phasenvorschubkompensator

Title (fr)

Unité de commande d'un moteur avec un compensateur de l'avance de la phase

Publication

**EP 1447546 B1 20160413 (EN)**

Application

**EP 04003045 A 20040211**

Priority

JP 2003034232 A 20030212

Abstract (en)

[origin: EP1447546A2] A peak gain of target torque with respect to a change in an accelerator position from 40% to 70% is expressed by a constant K. A time constant of phase advance compensation corresponding to a period for the target torque to change from a peak value to 63.2% of the peak value in the case where the accelerator position is changed from 40% to 70% is expressed by a constant É. A target torque response with respect to the change in the accelerator position is calculated through a phase advance compensator (26) by using the peak gain K and the time constant É, which have physical meanings. Thus, the target torque response with respect to the change in the accelerator position can be defined quantitatively, directly based on an elapsed time.

IPC 8 full level

**F02D 11/10** (2006.01); **F02D 31/00** (2006.01); **F02D 41/04** (2006.01); **F02D 41/10** (2006.01); **F02D 41/30** (2006.01); **F02D 45/00** (2006.01); **F02D 41/38** (2006.01); **F02D 41/40** (2006.01)

CPC (source: EP)

**F02D 11/105** (2013.01); **F02D 31/007** (2013.01); **F02D 41/10** (2013.01); **F02D 41/3836** (2013.01); **F02D 41/402** (2013.01); **F02D 2041/1424** (2013.01); **F02D 2041/1432** (2013.01); **F02D 2250/21** (2013.01)

Cited by

EP1650416A3; US9556840B2; WO2014053220A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1447546 A2 20040818**; **EP 1447546 A3 20060927**; **EP 1447546 B1 20160413**; CN 100398797 C 20080702; CN 1526932 A 20040908; JP 2004245094 A 20040902; JP 4089456 B2 20080528

DOCDB simple family (application)

**EP 04003045 A 20040211**; CN 200410005007 A 20040212; JP 2003034232 A 20030212