Title (en)
CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINE

Title (de)
STEUERUNGSVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
APPAREIL DE CONTRÔLE POUR MOTEUR À COMBUSTION INTERNE

Publication
EP 3078840 A1 20161012 (EN)

Application
EP 16155376 A 20160212

Priority
• JP 2015028873 A 20150217
• JP 2015189747 A 20150928

Abstract (en)
A control apparatus for an internal combustion engine is configured to: calculate measured data for MFB in synchrony with crank angle based on in-cylinder pressure detected by an in-cylinder pressure sensor; execute SA-CA10 feedback control and CA50 feedback control based on a measured CA10 and a measured CA50 that are calculated based on the measured data; execute engine control based on a degree of correlation between the MFB measured data and the reference data that corresponds thereto; and generate reference data for a combustion period by linear interpolation and linear extrapolation based on a target CA50 and a specified CA10.

IPC 8 full level
F02D 41/06 (2006.01)

CPC (source: CN EP US)
F02D 35/023 (2013.01 - CN US); **F02D 35/028** (2013.01 - US); **F02D 41/064** (2013.01 - EP); **F02D 41/3005** (2013.01 - US); F02D 2200/0614 (2013.01 - US)

Citation (applicant)
• JP 2008069713 A 20080327 - TOYOTA MOTOR CORP, et al
• JP 2011106334 A 20110602 - MITSUBISHI FUSO TRUCK & BUS

Citation (search report)
• [X] WO 2009040632 A2 20090402 - TOYOTA MOTOR CO LTD [JP], et al
• [X] EP 2119894 A1 20091118 - TOYOTA MOTOR CO LTD [JP]
• [A] US 2009259383 A1 20091015 - WANG YUE-YUN [US], et al
• [A] WO 2008032190 A1 20080320 - TOYOTA MOTOR CO LTD [JP], et al
• [A] GB 2473438 A 20110316 - GM GLOBAL TECH OPERATIONS INC [US]

Cited by
US10047687B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3078840 A1 20161012; CN 105888860 A 20160824; CN 105888860 B 20190308; JP 2016153641 A 20160825; JP 6020690 B2 20161102

DOCDB simple family (application)
EP 16155376 A 20160212; CN 201610086583 A 20160216; JP 2015189747 A 20150928