

Title (en)  
CONTROL DEVICE AND CONTROL METHOD FOR INTERNAL COMBUSTION ENGINE

Title (de)  
STEUERUNGSVORRICHTUNG UND STEUERUNGSVERFAHREN FÜR VERBRENNUNGSMOTOR

Title (fr)  
DISPOSITIF DE COMMANDE ET PROCÉDÉ DE COMMANDE POUR MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3379049 A1 20180926 (EN)**

Application  
**EP 18163371 A 20180322**

Priority  
JP 2017056391 A 20170322

Abstract (en)  
A control device for an internal combustion engine (10) including a piston (18), an oil jet (28) configured to inject oil toward the piston (18), and an actuator (34) configured to adjust a supply flow rate (Q) of the oil to the oil jet (28). The control device includes an electronic control unit (40) configured to control the actuator (34) such that the supply flow rate (Q) under the same engine load (KL) and the same engine rotation speed (NE) increases as a degree of deterioration of the oil increases.

IPC 8 full level  
**F01P 3/08** (2006.01)

CPC (source: CN EP US)  
**F01M 1/08** (2013.01 - US); **F01M 1/16** (2013.01 - US); **F01P 3/08** (2013.01 - EP US); **F02D 41/30** (2013.01 - CN); **F01M 2001/083** (2013.01 - US); **F01M 2250/60** (2013.01 - US); **F01M 2250/64** (2013.01 - US); **F01P 2025/40** (2013.01 - EP US); **F02D 2200/023** (2013.01 - EP US)

Citation (applicant)  
JP 2014080888 A 20140508 - TOYOTA MOTOR CORP

Citation (search report)

- [XDA] JP 2014080888 A 20140508 - TOYOTA MOTOR CORP
- [YA] JP S60252116 A 19851212 - HINO MOTORS LTD
- [YA] JP S5927260 A 19840213 - TOYOTA MOTOR CO LTD
- [A] US 2016363034 A1 20161215 - KIM YONG WOO [KR]
- [A] US 2005120982 A1 20050609 - DUCU DAN O [UA]

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 3379049 A1 20180926**; CN 108626012 A 20181009; JP 2018159309 A 20181011; US 2018274405 A1 20180927

DOCDB simple family (application)  
**EP 18163371 A 20180322**; CN 201810230137 A 20180320; JP 2017056391 A 20170322; US 201815924871 A 20180319