

Title (en)

STOP CONTROL APPARATUS FOR ENGINE, ENGINE SYSTEM, AND VEHICLE

Title (de)

STOPPSTEUERGERÄT FÜR EINEN MOTOR, MOTORSYSTEM UND FAHRZEUG

Title (fr)

APPAREIL DE CONTRÔLE D'ARRÊT POUR MOTEUR, SYSTÈME DE MOTEUR ET VÉHICULE

Publication

EP 4080030 A1 20221026 (EN)

Application

EP 22161227 A 20220310

Priority

JP 2021073096 A 20210423

Abstract (en)

A stop control apparatus for an engine includes a determination unit which determines whether or not an automatic stop condition is satisfied and a control unit which stops the engine when the automatic stop condition is satisfied. The control unit executes oxygen concentration adjustment control which controls a throttle valve and an EGR valve such that an oxygen concentration in an intake passage on a downstream side of a connection portion with an EGR passage has a predetermined target value D_x in a period until the engine is completely stopped after fuel cut is executed. The oxygen concentration adjustment control includes first control which sets the throttle valve to a valve-open state such that the oxygen concentration is elevated and a second control which closes the throttle valve at a time point when the oxygen concentration is elevated to the target value.

IPC 8 full level

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CPC (source: EP)

F02D 41/0055 (2013.01); **F02D 41/042** (2013.01); **F02D 2041/0017** (2013.01); **F02D 2041/0022** (2013.01); **F02D 2200/101** (2013.01)

Citation (applicant)

JP 2004100497 A 20040402 - NISSAN MOTOR

Citation (search report)

- [XI] US 2014136086 A1 20140515 - SASAKI TAKETSUGU [JP], et al
- [IA] WO 2008152483 A1 20081218 - TOYOTA MOTOR CO LTD [JP], et al
- [I] EP 3572657 A2 20191127 - FORD GLOBAL TECH LLC [US]
- [I] US 2003041830 A1 20030306 - SUGIURA MASANORI [JP], et al
- [A] DE 102019004797 A1 20210114 - MAN TRUCK & BUS SE [DE]
- [A] EP 2806143 A1 20141126 - PEUGEOT CITROEN AUTOMOBILES SA [FR]

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

Designated validation state (EPC)

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