

Title (en)

CONTROL DEVICE FOR INTERNAL COMBUSTION ENGINE

Title (de)

STEUERUNGSVORRICHTUNG FÜR BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF DE COMMANDE POUR MOTEUR À COMBUSTION INTERNE

Publication

EP 4067637 A4 20230118 (EN)

Application

EP 20891541 A 20200918

Priority

- JP 2019214838 A 20191128
- JP 2020035372 W 20200918

Abstract (en)

[origin: EP4067637A1] [Problem] The present invention provides a controller for an internal combustion engine capable of suppressing worsening of ride comfort at starting of a vehicle.[Means for Resolution] The controller for the internal combustion engine sets a start-time target engine speed of the internal combustion engine on the basis of a basic start-time target engine speed corresponding to an accelerator operation amount by a driver in a period until a vehicle speed reaches a specified cancellation threshold value when detecting a starting operation of the vehicle, sets idle rotation control torque of the internal combustion engine on the basis of a value of higher one of a target idle engine speed and the start-time target engine speed of the internal combustion engine, sets driver request torque of the internal combustion engine on the basis of basic driver request torque corresponding to the accelerator operation amount by the driver such that a change speed does not exceed a specified threshold value, adds the idle rotation control torque to the driver request torque so as to set target torque with specified upper limit torque as an upper limit, and, when a sum of the idle rotation control torque and the basic driver request torque exceeds the upper limit torque at the time of controlling the internal combustion engine on the basis of the target torque, sets the idle rotation control torque, from which at least differential torque between the sum and the upper limit torque is subtracted.

IPC 8 full level

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Citation (search report)

- [A] JP 2000352340 A 20001219 - FUJI HEAVY IND LTD
- [AD] JP 2016200093 A 20161201 - ISUZU MOTORS LTD
- [A] EP 1650416 B1 20141203 - DENSO CORP [JP]
- [A] US 2005016162 A1 20050127 - MEHTA VIVEK [US], et al

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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DOCDB simple family (application)

EP 20891541 A 20200918; JP 2020035372 W 20200918; JP 2021561182 A 20200918