

Title (en)

METHOD AND SYSTEM FOR COMPENSATING FOR ACYCLIC BEHAVIOUR OF A HEAT ENGINE BY USING A ROTARY ELECTRIC MACHINE

Title (de)

VERFAHREN UND SYSTEM ZUR KOMPENSATION DES ACYCLISCHEN VERHALTENS EINES WÄRMEMOTORS MITTELS EINER ELEKTRISCHEN DREHMASCHINE

Title (fr)

PROCÉDÉ ET SYSTÈME DE COMPENSATION DES ACYCLISMES D'UN MOTEUR THERMIQUE PAR UNE MACHINE ÉLECTRIQUE TOURNANTE

Publication

EP 3661783 A1 20200610 (FR)

Application

EP 18746695 A 20180727

Priority

- FR 1757553 A 20170804
- EP 2018070402 W 20180727

Abstract (en)

[origin: WO2019025306A1] The invention relates chiefly to a method for compensating for acyclic behaviour of a motor vehicle heat engine (12), the heat engine (12) belonging to a powertrain (10), characterized in that the said method involves: – a step of measuring a physical parameter associated with the rotation of a crankshaft of the heat engine (12), the step of measuring the physical parameter being performed by means of a sensor (27, 27') located between the mechanical damper (20) and the heat engine (12), – a step of determining, from the measured physical parameter, a variation in torque associated with the acyclic behaviour of the heat engine (12), taking account of a transfer function caused by the mechanical damper (20), – a step of subtracting this variation in torque from a reference setpoint torque (Cref) of the rotary electric machine (17) in order to determine a control setpoint torque (Cref'), – a step (106) of operating the rotary electric machine (17) in order to obtain the control setpoint torque (Cref').

IPC 8 full level

B60K 6/48 (2007.10); **B60W 10/08** (2006.01); **B60W 20/17** (2016.01); **B60W 30/20** (2006.01); **B60W 50/00** (2006.01)

CPC (source: EP)

B60K 6/48 (2013.01); **B60W 20/17** (2016.01); **B60W 30/20** (2013.01); **B60W 10/08** (2013.01); **B60W 2030/206** (2013.01);
B60W 2050/001 (2013.01); **B60W 2050/0021** (2013.01); **B60W 2050/0022** (2013.01); **B60W 2050/0039** (2013.01); **B60W 2050/0052** (2013.01);
B60W 2510/0638 (2013.01); **B60W 2510/0657** (2013.01); **B60W 2510/0661** (2013.01); **B60W 2510/088** (2013.01); **B60W 2710/083** (2013.01);
Y02T 10/62 (2013.01)

Citation (examination)

- JP 2009067216 A 20090402 - NISSAN MOTOR
- JP 2001136605 A 20010518 - TOYOTA MOTOR CORP
- US 2012078456 A1 20120329 - HAKUMURA YOMEI [JP], et al
- See also references of WO 2019025306A1

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)

WO 2019025306 A1 20190207; CN 111094041 A 20200501; EP 3661783 A1 20200610; FR 3069829 A1 20190208; FR 3069829 B1 20201120

DOCDB simple family (application)

EP 2018070402 W 20180727; CN 201880060044 A 20180727; EP 18746695 A 20180727; FR 1757553 A 20170804