

Title (en)

CONTROL LOOP OF A DIGITAL CONTROL DEVICE OF A ROTARY ELECTRIC MACHINE WITH EXCITATION OF A MOTOR VEHICLE

Title (de)

REGELSCHLEIFE FÜR EINE DIGITALE STEUERUNGSVORRICHTUNG EINER ELEKTRISCHEN DREHMASCHINE MIT ANREGUNG EINES KRAFTFAHRZEUGS

Title (fr)

BOUCLE DE RÉGULATION D'UN DISPOSITIF RÉGULATEUR NUMÉRIQUE DE MACHINE ÉLECTRIQUE TOURNANTE A EXCITATION DE VÉHICULE AUTOMOBILE

Publication

EP 3155718 A2 20170419 (FR)

Application

EP 15729548 A 20150601

Priority

- FR 1455284 A 20140611
- FR 2015051431 W 20150601

Abstract (en)

[origin: WO2015189496A2] The invention relates to a control loop (10) which is installed in a voltage regulator of a motor vehicle alternator and controls an output voltage of the latter by adjusting an excitation current of the alternator. The control loop includes, at the input, means for measuring (31) the output voltage by sampling, generating a measurement signal (Um), error-calculation means (13) generating an error signal (e) equal to a difference between the measurement signal (Um) and a set value (Uo), means for processing the error signal (e) including an amplifier (14) and generating a control signal (Ysat) and, at the output, means (35) for generating a control signal (PWM) controlling excitation control means in accordance with the control signal (Ysat). According to the invention, the processing means also include a phase-advance filter (24).

IPC 8 full level

H02P 9/30 (2006.01); **G05F 1/575** (2006.01)

CPC (source: EP US)

H02P 9/305 (2013.01 - EP US); **G05F 1/575** (2013.01 - US)

Citation (search report)

See references of WO 2015189496A2

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 2015189496 A2 20151217; WO 2015189496 A3 20160317; EP 3155718 A2 20170419; FR 3022416 A1 20151218;
FR 3022416 B1 20170825; US 2017133964 A1 20170511; US 9960718 B2 20180501

DOCDB simple family (application)

FR 2015051431 W 20150601; EP 15729548 A 20150601; FR 1455284 A 20140611; US 201515317454 A 20150601