

Title (en)

METHOD FOR EVALUATING A COASTDOWN LOAD, AND ASSISTED DRIVING METHOD

Title (de)

VERFAHREN ZUR BEWERTUNG EINER AUSROLLLAST UND VERFAHREN FÜR UNTERSTÜTZTES FAHREN

Title (fr)

PROCÉDÉ D'ÉVALUATION D'UNE LOI DE DÉCÉLÉRATION ET PROCÉDÉ D'ASSISTANCE À LA CONDUITE

Publication

EP 3990327 A1 20220504 (FR)

Application

EP 20734750 A 20200629

Priority

- FR 1907163 A 20190628
- EP 2020068234 W 20200629

Abstract (en)

[origin: WO2020260691A1] The invention relates to a method for evaluating the coastdown load of a vehicle comprising an accelerator pedal, a brake pedal, and a drivetrain comprising an engine, a gearbox and a disconnect member between the engine and the gearbox, the coastdown load being defined for a discrete state of the drivetrain, and the method for evaluating the coastdown load comprising: - a first step (100) of evaluating driving parameters comprising: measuring the speed (v) of the vehicle, evaluating the selected gearbox ratio, evaluating the state of closure of the disconnect member, detecting the position of the accelerator pedal, detecting the position of the brake pedal, evaluating the slope (a) of the road on which the vehicle is travelling, and evaluating the mass (m) of the vehicle, - if the accelerator pedal and the brake pedal are in a released position, a second step (200) comprising: recording the speed (v) of the vehicle and the slope (a) of the road, - a third step (300) of calculating a first coefficient (f0'), a second coefficient (f1') and a third coefficient (f2') of the coastdown load representing the forces F(v) acting on the vehicle, with the exception of the gravitational forces acting on the vehicle, according to the equation: $F(v)=f_0' + f_1' \cdot v + f_2' \cdot v^2$. The invention also relates to an energy-saving assisted driving method using the coastdown load evaluated by means of the above method.

IPC 8 full level

B60W 30/18 (2012.01); **B60W 40/10** (2012.01); **B60W 50/00** (2006.01); **B60W 50/14** (2020.01)

CPC (source: EP US)

B60W 40/10 (2013.01 - EP); **B60W 40/1005** (2013.01 - EP); **B60W 50/0097** (2013.01 - EP); **B60W 50/14** (2013.01 - EP US); **G01C 21/3469** (2013.01 - US); **B60W 2030/18081** (2013.01 - EP); **B60W 2510/0208** (2013.01 - EP US); **B60W 2510/0638** (2013.01 - EP US); **B60W 2510/08** (2013.01 - EP); **B60W 2510/1005** (2013.01 - EP US); **B60W 2520/10** (2013.01 - EP US); **B60W 2530/10** (2013.01 - EP US); **B60W 2530/209** (2020.02 - EP US); **B60W 2540/049** (2020.02 - EP); **B60W 2540/10** (2013.01 - EP US); **B60W 2540/12** (2013.01 - EP US); **B60W 2552/15** (2020.02 - EP US); **B60W 2555/40** (2020.02 - US); **B60W 2556/50** (2020.02 - EP); **Y02T 10/40** (2013.01 - EP); **Y02T 10/60** (2013.01 - EP)

Citation (search report)

See references of WO 2020260691A1

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)

FR 3097830 A1 20210101; **FR 3097830 B1 20210820**; EP 3990327 A1 20220504; US 2022289222 A1 20220915; WO 2020260691 A1 20201230

DOCDB simple family (application)

FR 1907163 A 20190628; EP 2020068234 W 20200629; EP 20734750 A 20200629; US 202017623033 A 20200629