

Title (en)

Device and method for the on-line prediction of the driving cycle in an automotive vehicle

Title (de)

Verfahren und Vorrichtung zur Online-Vorhersage des Fahrzyklus in einem Automobil

Title (fr)

Dispositif et procédé pour la prédition en ligne du cycle d'entraînement dans un véhicule automobile

Publication

**EP 2610836 B1 20150218 (EN)**

Application

**EP 12382494 A 20121212**

Priority

ES 201132144 A 20111230

Abstract (en)

[origin: EP2610836A1] The invention relates to a device and method for the on-line prediction of the driving cycle in an automotive vehicle. The method comprises: - a step of data pre-processing (200); #c receiving the vehicle speed ( $V_{sp}$ ); #c receiving traffic information (HTI) of the expected path in a prediction horizon (H); #c obtaining (212) a reference driving cycle ( $V_{pat}$ ); #c calculating (208) the deviation ( $DV_{sp}$ ) of the speed ( $V_{sp}$ ) with respect to the reference driving cycle ( $V_{pat}$ ); - a step of data processing by means of a neural network (202) for recursively obtaining the expected deviations ( $D^*V_{sp}$ ) for the prediction horizon (H); - a step of data post-processing (204) which comprises obtaining the estimated speed ( $V^*_{sp}$ ) for said prediction horizon (H) from the expected deviations ( $D^*V_{sp}$ ) and the reference driving cycle ( $V_{pat}$ ) for the prediction horizon (H).

IPC 8 full level

**G08G 1/01** (2006.01)

CPC (source: EP ES)

**G08G 1/0129** (2013.01 - EP ES)

Cited by

US11794757B2; CN111260117A; DE102019213749A1; CN111008505A; CN115859123A; CN104118328A; CN105006147A; CN106997662A; CN109345832A; CN108053067A; CN114450207A; US12024025B2; US11199419B2; WO2021093953A1; EP3725633A1; EP3340001A1; CN109615064A; CN110349420A; EP3726434A1; US11752881B2; CN109215350A; EP3726436A1; CN114523967A; US11661067B2; US10551842B2; WO2021078390A1; US11675361B2; US11685262B2; WO2021078391A1; DE102021202468A1; WO2022194410A1; EP3725633B1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2610836 A1 20130703; EP 2610836 B1 20150218; ES 2411629 A2 20130705; ES 2411629 B1 20140311; ES 2411629 R1 20130828; ES 2535689 T3 20150513**

DOCDB simple family (application)

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