Title (en)

METHOD FOR TRAINING AT LEAST ONE ALGORITHM FOR A CONTROL DEVICE OF A MOTOR VEHICLE, METHOD FOR OPTIMISING TRAFFIC FLOW IN A REGION, COMPUTER PROGRAM PRODUCT, AND MOTOR VEHICLE

Title (de)

VERFAHREN ZUM TRAINIEREN WENIGSTENS EINES ALGORITHMUS FÜR EIN STEUERGERÄT EINES KRAFTFAHRZEUGS, VERFAHREN ZUR OPTIMIERUNG EINES VERKEHRSFLUSSES IN EINER REGION, COMPUTERPROGRAMMPRODUKT SOWIE KRAFTFAHRZEUG

Title (fr)

PROCÉDÉ POUR ENTRAÎNER AU MOINS UN ALGORITHME DESTINÉ À UN APPAREIL DE COMMANDE D'UN VÉHICULE À MOTEUR, PROCÉDÉ POUR OPTIMISER UN FLUX DE TRAFIC DANS UNE RÉGION, PRODUIT-PROGRAMME D'ORDINATEUR ET VÉHICULE À MOTEUR

Publication

EP 4107590 A1 20221228 (DE)

Application

EP 21704766 A 20210210

Priority

- DE 102020201931 A 20200217
- EP 2021053181 W 20210210

Abstract (en)

[origin: WO2021165113A1] The invention relates to a method for training at least one algorithm for a control device of a motor vehicle using a self-learning neural network, the method comprising the following steps: providing a simulation environment containing map data of an actually existing deployment area, the behaviour of the motor vehicle being determined by a rule set; providing real-time traffic data of the actually existing deployment area and replicating the traffic situation in the simulation environment; providing a mission for the motor vehicle, in which the motor vehicle travels in front of at least one other simulated motor vehicle; simulating the mission in the simulation environment; and determining the traffic flow metric of the mission, wherein, if the traffic flow metric is below a threshold value, the at least one algorithm and/or the at least one rule set is modified and the mission is repeated, or, if the traffic flow metric is above the threshold value, the mission is classified as successful.

IPC 8 full level

G05B 13/04 (2006.01)

CPC (source: EP)

G05B 13/04 (2013.01); **G05D 1/0088** (2024.01); **G06N 3/088** (2013.01); G06N 3/006 (2013.01)

Citation (search report)

See references of WO 2021165113A1

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)

KH MA MD TN

DOCDB simple family (publication)

DE 102020201931 A1 20210819; CN 115136081 A 20220930; EP 4107590 A1 20221228; WO 2021165113 A1 20210826

DOCDB simple family (application)

DE 102020201931 A 20200217; CN 202180015176 A 20210210; EP 2021053181 W 20210210; EP 21704766 A 20210210