Title (en)

CONTROL SYSTEM AND METHOD FOR ASSISTING MOTOR VEHICLES IN SAFELY PULLING IN AFTER OVERTAKING

Title (de)

STEUERUNGS-SYSTEM UND VERFAHREN ZUM UNTERSTÜTZEN EINES SICHEREN EINSCHERENS VON KRAFTFAHRZEUGEN NACH EINEM ÜBERHOLVORGANG

Title (fr)

SYSTÈME DE COMMANDE ET PROCÉDÉ D'AIDE AU RABATTEMENT DE VÉHICULES À MOTEUR EN TOUTE SÉCURITÉ APRÈS UNE MANOEUVRE DE DÉPASSEMENT

Publication

EP 3280625 A1 20180214 (DE)

Application

EP 16714392 A 20160401

Priority

- DE 102015004476 A 20150407
- EP 2016057227 W 20160401

Abstract (en)

[origin: WO2016162282A1] The invention relates to a control system which is equipped and designed for use in a motor vehicle, to determine, on the basis of environment data obtained by one or more environment sensors present on the motor vehicle, a point in time as of which a safe lane change from a fast lane to an adjoining slower lane is possible. The environment sensors are designed to provide environment data representing the area laterally ahead of, laterally next to and/or laterally behind the vehicle to an electronic control unit of the control system. The control system is at least equipped and designed to determine, during a predefined interval or continuously, in the electronic control unit driving data representing the driving situation of one's own motor vehicle from sensors present in one's own motor vehicle. One or more other vehicles using the road laterally ahead of, laterally next to and/or laterally behind one's own motor vehicle are detected by means of the environment sensors during the predefined interval or continuously in order to determine characteristic variables relating to the driving situation(s) of the one or more other vehicles. On the basis of the driving data representing the driving situation of one's own vehicle and on the basis of the characteristic variables relating to the driving situation(s) of the one or more other vehicles, it is determined whether a safety-critical area laterally next to and/or laterally behind one's own motor vehicle is free of said other vehicle(s) and the finding is output optically, haptically and/or acoustically to the driver of one's own vehicle. The control system is equipped and designed to determine, on the basis of the driving data representing the driving situation of one's own vehicle and on the basis of the characteristic variables relating to the driving situation(s) of the one or more other vehicles, in the electronic control unit the point in time as of which a safe lane change is possible. This point in time is considered to be reached when the electronic control unit determines that a rear edge of one's own motor vehicle has gone past a front edge of the other vehicle and past a safety distance adapted to legal and/or physical conditions.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

See references of WO 2016162282A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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