

Title (en)

METHOD AND DEVICE FOR COORDINATING DRIVING MANOEUVRES BETWEEN ONE VEHICLE AND AT LEAST ONE OTHER VEHICLE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ABSTIMMUNG VON FAHRMANÖVERN ZWISCHEN EINEM FAHRZEUG UND MINDESTENS EINEM ALIUS-FAHRZEUG

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR ACCORDER DES MANOEUVRES DE CONDUITE ENTRE UN VÉHICULE ET AU MOINS UN AUTRE VÉHICULE

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Application

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Abstract (en)

[origin: WO2019185584A1] The invention relates to a method and a device for coordinating driving manoeuvres between one vehicle (A) and at least one other vehicle (B, C, D), comprising the following steps: determining (50) a planned driving path of one of the vehicles (A); determining surroundings information of the vehicle (A) by means of surroundings sensors of the vehicle (52); determining an ideal trajectory (40A) along the driving path on the basis of the driving path and the surroundings information; determining a safety trajectory (42A) along the driving path (60), the safety trajectory (42A) following the same driving path as the ideal trajectory (40A) but being shorter; transmitting the ideal trajectory (40A) and the safety trajectory (42A) to the other vehicles (62); receiving (64) the ideal trajectory (40B, 40C, 40D) and the safety trajectory (42B, 42C, 42D) of the other vehicles (B, C, D); determining whether a conflict situation arises (68) when the vehicle (A) and the other vehicles (B, C, D) move along their ideal trajectories (40A, 40B, 40C, 40D); in the event of a conflict situation being confirmed (68), determining a conflict-free default set of trajectories for all vehicles (A, B, C, D), selected for each vehicle (A, B, C, D) from the ideal trajectory or the safety trajectory (40, 42) on the basis of the same set of rules for all vehicles (A, B, C, D); and moving the vehicle (A) along the default trajectory (70) defined therefor.

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