Title (en)

LANE KEEPING ASSISTANCE SYSTEM

Title (de)

SPURHALTEASSISTENZSYSTEM

Title (fr)

SYSTÈME DE SUIVI DE VOIE

Publication

EP 3326165 A1 20180530 (DE)

Application

EP 16744711 A 20160722

Priority

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Abstract (en)

[origin: WO2017013260A1] The invention relates to a lane keeping assistance system for a vehicle, comprising: a means (101) for detecting a current first position P1 (t) of the vehicle in a road traffic network having a position accuracy ΔP1: P1(t) = P1(t) ± ΔP1, a first interface (102) for providing a target trajectory ST(t) of the vehicle in the road traffic network, a second interface (103) for providing georeferenced position data POR,i, POL,i of objects ORi of a right traffic lane boundary and georeferenced position data of objects OLi of a left traffic lane boundary, and of 2D or 3D radar signatures RSOR,i and RSOL,i of these objects ORi, OLi, for the route section of the road traffic network being traveled by the vehicle. The georeferenced position data POR,i, POL,i have a position accuracy ΔP2, wherein ΔP2 < ΔP1, i = 1, 2, 3, ….The invention further comprises a radar system (104) for scanning a right and a left lateral environment of the vehicle for detecting distances DOR to objects OR present laterally to the right of the vehicle and the radar signatures RSOR thereof, and distances DOL to objects OL present laterally to the left of the vehicle and the radar signatures RSOL thereof, an evaluation unit (105), by way of which initially, based on the first position P1(t), the provided data POR,i, POL,i, RSOR,i and RSOL,i, and the detected data DOR, RSOR, DOL, RSOL, an identification of the detected objects OR and OL as ORi, OLi takes place, and based thereupon, a second position P2(t) of the vehicle is detected, the position accuracy of which has a position precision ΔP2, at least in one dimension, and a control device (106) for the transverse control of the vehicle, by way of which the transverse control of the vehicle is done, taking into account the target trajectory ST(t) and the position P2(t).

IPC 8 full level

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Citation (examination)

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- DE 102013015892 B4 20151224 - DEUTSCHES ZENTRUM FUER LUFT & RAUMFAHRT EV [DE]
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