

Title (en)

DETECTION SYSTEM AND METHOD FOR ASCERTAINING AN ARTICULATION ANGLE BETWEEN TWO SUB-VEHICLES OF A VEHICLE COMBINATION, AND VEHICLE COMBINATION

Title (de)

ERFASSUNGSSYSTEM UND VERFAHREN ZUM ERMITTELN EINES KNICKWINKELS ZWISCHEN ZWEI TEILFAHRZEUGEN EINES FAHRZEUG-GESPANNS SOWIE FAHRZEUG-GESPANN

Title (fr)

SYSTÈME DE DÉTECTION ET PROCÉDÉ POUR LA DÉTERMINATION D'UN ANGLE D'ARTICULATION ENTRE DEUX VÉHICULES PARTIELS D'UN ATTELAGE DE VÉHICULE AINSI QU'ATTELAGE DE VÉHICULE

Publication

EP 3938222 A1 20220119 (DE)

Application

EP 20712853 A 20200304

Priority

- DE 102019106275 A 20190312
- EP 2020055664 W 20200304

Abstract (en)

[origin: WO2020182570A1] The invention relates to a detection system (4) for ascertaining an articulation angle (K) between two sub-vehicles (2.i, i=1,2,...N, Z, A), which are connected together in an articulated manner, of a vehicle combination, comprising: - a detection device (6), wherein the detection device (6) is arranged on one of the sub-vehicles (2.i; Z) of the vehicle combination, and a detection region (6a) of the detection device (6) is oriented towards a sub-region (8a) of another sub-vehicle (2.i; A) connected to the sub-vehicle (2.i; Z) in an articulated manner such that detection signals can be generated and output by the detection device (6), said detection signals characterizing the sub-region (8a) on the other sub-vehicle (2.i; A), and - a processing unit (7) which is designed to receive the detection signals and ascertain the articulation angle between the two sub-vehicles (2.i; Z, A) using the detection signals. According to the invention, the detection system (4) has a projection device (5) which is designed to image a specified pattern (M) on the sub-region (8a) on the other sub-vehicle (2.i; A) in order to generate a pattern image (MA) on the other sub-vehicle (2.i; A). The pattern image (MA) can be extracted from the detection signals (S) by the processing unit (7), and the processing unit (7) is designed to ascertain the articulation angle (K) using the extracted pattern image (MA).

IPC 8 full level

B60D 1/62 (2006.01)

CPC (source: EP US)

B60D 1/30 (2013.01 - US); **B60D 1/62** (2013.01 - EP US); **B62D 15/02** (2013.01 - US)

Citation (search report)

See references of WO 2020182570A1

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

DOCDB simple family (publication)

WO 2020182570 A1 20200917; CN 113518721 A 20211019; DE 102019106275 A1 20200917; EP 3938222 A1 20220119; US 11813910 B2 20231114; US 2022161619 A1 20220526

DOCDB simple family (application)

EP 2020055664 W 20200304; CN 202080018340 A 20200304; DE 102019106275 A 20190312; EP 20712853 A 20200304; US 202017437059 A 20200304