

Title (en)

DEVICE AND METHOD FOR DETECTING A PIVOT ANGLE BETWEEN A VEHICLE AND A TRAILER DEVICE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERFASSUNG EINES SCHWENKWINKELS ZWISCHEN EINEM FAHRZEUG UND EINER ANHÄNGERVORRICHTUNG

Title (fr)

DISPOSITIF ET PROCÉDÉ DE DÉTECTION D'UN ANGLE DE PIVOTEMENT ENTRE UN VÉHICULE ET UNE REMORQUE

Publication

**EP 3164276 A1 20170510 (DE)**

Application

**EP 15729369 A 20150602**

Priority

- DE 102014212821 A 20140702
- EP 2015062215 W 20150602

Abstract (en)

[origin: WO2016000893A1] The invention relates to a pivot angle detection device and to a method for detecting a pivot angle ( $\alpha$ ) between a vehicle (1) and a trailer device (2, 2') coupled to the vehicle (1). A transmitter (5, 5') is provided which is designed to generate an electromagnetic field (F), and a receiver (4, 4') is provided which is designed to detect a field strength of the electromagnetic field (F). The transmitter (5, 5') and the receiver (4, 4') are arranged relative to each other on the vehicle (1) and the trailer device (2) such that a change of the pivot angle ( $\alpha$ ) causes a change dependent thereon of the field strength detected by the receiver (4, 4'). Additionally, an analyzing device (6) is provided for ascertaining the pivot angle ( $\alpha$ ) using the detected field strength. The invention also relates to a transmitter (5, 5') designed for this purpose, a receiver (4, 4'), and an analyzing device (6).

IPC 8 full level

**B60D 1/06** (2006.01); **B60D 1/24** (2006.01); **B60D 1/30** (2006.01); **B60D 1/62** (2006.01)

CPC (source: CN EP US)

**B60D 1/06** (2013.01 - CN EP US); **B60D 1/245** (2013.01 - CN EP US); **B60D 1/30** (2013.01 - CN EP US); **B60D 1/62** (2013.01 - CN EP US);  
**B62D 13/06** (2013.01 - CN); **G01S 3/14** (2013.01 - US)

Citation (search report)

See references of WO 2016000893A1

Citation (examination)

DE 102006056408 A1 20080619 - UNIV KOBLENZ LANDAU [DE]

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)

**DE 102014212821 A1 20160107**; BR 112016028825 A2 20170822; CN 106536234 A 20170322; CN 106536234 B 20190625;  
EP 3164276 A1 20170510; JP 2017528357 A 20170928; JP 6603677 B2 20191106; US 10414221 B2 20190917; US 2017136839 A1 20170518;  
WO 2016000893 A1 20160107

DOCDB simple family (application)

**DE 102014212821 A 20140702**; BR 112016028825 A 20150602; CN 201580033325 A 20150602; EP 15729369 A 20150602;  
EP 2015062215 W 20150602; JP 2016575818 A 20150602; US 201515322363 A 20150602