

Title (en)

DRIVER ASSISTANCE DEVICE FOR A VEHICLE AND METHOD FOR OPERATING A RADAR UNIT

Title (de)

FAHRERASSISTENZEINRICHTUNG FÜR EIN FAHRZEUG UND VERFAHREN ZUM BETREIBEN EINES RADARGERÄTS

Title (fr)

SYSTÈME D'AIDE À LA CONDUITE POUR UN VÉHICULE ET PROCÉDÉ POUR FAIRE FONCTIONNER UN DISPOSITIF RADAR

Publication

**EP 2681583 A1 20140108 (DE)**

Application

**EP 12704035 A 20120208**

Priority

- DE 102011012843 A 20110303
- EP 2012052082 W 20120208

Abstract (en)

[origin: WO2012116876A1] The invention relates to a driver assistance device (2) for a vehicle (1), having a radar unit (3, 4) for detecting a measured variable (a1, a2, R1, R2) in relation to an object (10) outside the vehicle, wherein the radar unit (3, 4) comprises: at least one first and one second receiving antenna (14, 15) for receiving signals (SE1, SE2); a first down-conversion mixer (17) coupled to the first receiving antenna (14) via a first receiving path (16), and a second down-conversion mixer (23) coupled to the second receiving antenna (15) via a second receiving path (21) for down-converting the received signals (SE1, SE2) to respective base band signals (SB1, SB2); a control unit (5) for determining the measured variable (a1, a2, R1, R2) on the basis of the base band signals (SB1, SB2); and testing means (32) for generating a local pilot signal (SP) and for inserting the pilot signal (SP) into the first receiving path (16) and into the second receiving path (21) such that the control unit (5) receives the pilot signal (SP) down-converted by the first down-conversion mixer (17) as a first test signal (ST1), and receives the pilot signal (SP) down-converted by the second down-conversion mixer (23) as a second test signal (ST2). From the test signals (ST1, ST2), the control unit (5) determines a frequency-dependent correcting quantity (d(f)) for correcting the measured variable (a1, a2, R1, R2). The invention further relates to a corresponding method.

IPC 8 full level

**G01S 7/40** (2006.01); **G01S 13/931** (2020.01)

CPC (source: CN EP KR US)

**G01S 7/40** (2013.01 - KR US); **G01S 7/4021** (2013.01 - CN EP US); **G01S 13/93** (2013.01 - KR); **G01S 13/931** (2013.01 - CN EP US); **G01S 2013/9314** (2013.01 - EP US); **G01S 2013/9315** (2020.01 - EP US); **G01S 2013/9321** (2013.01 - EP US); **G01S 2013/93272** (2020.01 - EP US)

Citation (search report)

See references of WO 2012116876A1

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

DOCDB simple family (publication)

**DE 102011012843 A1 20120906**; CN 103502838 A 20140108; CN 103502838 B 20160224; EP 2681583 A1 20140108; JP 2014513272 A 20140529; KR 20140036155 A 20140325; US 2014168006 A1 20140619; US 9482745 B2 20161101; WO 2012116876 A1 20120907

DOCDB simple family (application)

**DE 102011012843 A 20110303**; CN 201280021757 A 20120208; EP 12704035 A 20120208; EP 2012052082 W 20120208; JP 2013555814 A 20120208; KR 20137023238 A 20120208; US 201214001728 A 20120208