

Title (en)

RADAR SENSOR DEVICE AND DRIVER ASSISTANCE SYSTEM WITH DETERMINATION OF THE OBJECT ANGLE OF ELEVATION ON THE BASIS OF ENTRY OF THE OBJECT INTO THE NULL OF THE ANTENNA CHARACTERISTIC BETWEEN THE MAIN LOBE AND THE FIRST SIDE LOBE

Title (de)

RADARSENSOREINRICHTUNG UND FAHRERASSISTENZSYSTEM MIT BESTIMMUNG DES OBJEKT-ELEVATIONSWINKELS ANHAND DES EINTRITTS DES OBJEKTS IN DIE NULLSTELLE DER ANTENNENCHARAKTERISTIK ZWISCHEN DER HAUPT- UND DER ERSTEN NEBENKEULE

Title (fr)

DISPOSITIF DE DÉTECTION RADAR ET SYSTÈME D'AIDE À LA CONDUITE PAR DÉTERMINATION DE L'ANGLE D'ÉLEVATION D'UN OBJET AU MOYEN DE L'ENTRÉE DE L'OBJET DANS LE POINT ZÉRO DE LA CARACTÉRISTIQUE D'ANTENNE ENTRE LE LOBE PRINCIPAL ET LE PREMIER LOBE SECONDAIRE

Publication

EP 3387460 A1 20181017 (DE)

Application

EP 16790318 A 20161027

Priority

- DE 102015121343 A 20151208
- EP 2016075927 W 20161027

Abstract (en)

[origin: WO2017097493A1] The invention relates to a radar sensor device (15) for a driver assistance system (14) of a motor vehicle (13) for sensing an object (O1, O2, O3) in a surrounding area (3) of the motor vehicle (13), with at least one radar sensor (16) having a first transmission antenna (18) for transmitting first transmission signals, wherein the first transmission antenna (18) has a first directional characteristic (20) oriented along a first direction (21) and wherein the radar sensor (16) is designed to sense the first transmission signals reflected from the object (O1, O2, O3) as first echo signals, wherein the first directional characteristic (20) of the first transmission antenna (18) has a null (24) at a predetermined null value angle (25), and the radar sensor device (15) has a control device (17) that is designed to determine an elevation (E) of the object (O1, O2, O3) when the object (O1, O2, O3) enters the null (24) on the basis of the first echo signal and the null value angle (25). The invention also relates to a driver assistance system (14), a motor vehicle (13) and a method.

IPC 8 full level

G01S 13/42 (2006.01); **G01S 13/931** (2020.01)

CPC (source: EP)

G01S 13/424 (2013.01); **G01S 13/931** (2013.01); **G01S 2013/93271** (2020.01)

Citation (search report)

See references of WO 2017097493A1

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 102015121343 A1 20170608; EP 3387460 A1 20181017; WO 2017097493 A1 20170615

DOCDB simple family (application)

DE 102015121343 A 20151208; EP 16790318 A 20161027; EP 2016075927 W 20161027