

Title (en)

METHOD AND DEVICE FOR DETERMINING THE POSITION OF A VEHICLE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR POSITIONSBESTIMMUNG EINES FAHRZEUGS

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR DÉTERMINER LA POSITION D'UN VÉHICULE

Publication

EP 3304123 A1 20180411 (DE)

Application

EP 16721806 A 20160510

Priority

- DE 102015210015 A 20150601
- EP 2016060428 W 20160510

Abstract (en)

[origin: WO2016192934A1] The invention relates to a method for determining the position of a vehicle, wherein the method comprises the following steps: determining a GNS vehicle position by means of a GNS unit, sensing an environment of the GNS vehicle position by means of a radar sensor system of the vehicle in order to determine radar data corresponding to the sensed environment, detecting objects located in the environment on the basis of the radar data, determining a directional vector that points from a detected object to a vehicle-fixed reference point, comparing the radar data and the determined directional vector with a digital map, which has objects and directional vectors associated with the objects, wherein the directional vectors associated with the objects point to a position in the digital map from which the corresponding object was sensed by means of a radar sensor system, determining a corrected vehicle position on the basis of the GNS vehicle position and the comparison. The invention further relates to a device for determining the position of a vehicle, to a method and to a device for creating a digital map, and to a computer program.

IPC 8 full level

G01S 13/86 (2006.01); **G01S 13/89** (2006.01); **G01S 13/931** (2020.01); **G01S 19/40** (2010.01)

CPC (source: CN EP US)

G01S 13/86 (2013.01 - CN EP US); **G01S 13/89** (2013.01 - CN EP US); **G01S 13/931** (2013.01 - CN EP US); **G01S 19/40** (2013.01 - CN EP US); **G01S 2013/9316** (2020.01 - CN EP US); **G01S 2013/932** (2020.01 - CN EP US); **G01S 2013/9322** (2020.01 - CN EP US)

Citation (search report)

See references of WO 2016192934A1

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 102015210015 A1 20161201; CN 107735692 A 20180223; CN 107735692 B 20220114; EP 3304123 A1 20180411; JP 2018523104 A 20180816; JP 6516881 B2 20190522; US 10698100 B2 20200630; US 2018149739 A1 20180531; WO 2016192934 A1 20161208

DOCDB simple family (application)

DE 102015210015 A 20150601; CN 201680031838 A 20160510; EP 16721806 A 20160510; EP 2016060428 W 20160510; JP 2017562633 A 20160510; US 201615576447 A 20160510