

Title (en)

METHOD FOR DETERMINING A RESPECTIVE BOUNDARY OF AT LEAST ONE OBJECT, SENSOR DEVICE, DRIVER ASSISTANCE DEVICE AND MOTOR VEHICLE

Title (de)

VERFAHREN ZUR BESTIMMUNG EINER JEWEILIGEN GRENZE VON MINDESTENS EINEM OBJEKT, SENSORVORRICHTUNG, FAHRERASSISTENZVORRICHTUNG UND KRAFTFAHRZEUG

Title (fr)

PROCÉDÉ POUR DÉTERMINER UNE LIMITE RESPECTIVE D'AU MOINS UN OBJET, DISPOSITIF DE CAPTEUR, DISPOSITIF D'ASSISTANCE AU CONDUCTEUR ET VÉHICULE AUTOMOBILE

Publication

EP 3146462 A1 20170329 (EN)

Application

EP 15722677 A 20150429

Priority

- DE 102014007565 A 20140522
- EP 2015059400 W 20150429

Abstract (en)

[origin: WO2015176933A1] The invention relates to a method for determining a respective boundary (8) of at least one object (7) in an environmental region (5) of a motor vehicle (1) based on sensor data of an optical sensor (3) of a sensor device (2) of the motor vehicle (1), wherein the following steps are performed by means of an image processing device (4) of the sensor device (2). A point cloud (11) with a plurality of points (10) is determined based on the sensor data and the point cloud (11) is transformed into a plan view image (13), which represents the environmental region (5) of the motor vehicle (1). With the image processing device (4), the following steps are performed in the plan view image (13). A reference point (14) is determined in the plan view image (13), which describes a position of the optical sensor (3), and the plan view image (13) is divided into a plurality of segments (15) starting from the reference point (14). Furthermore, a respective selection point (9) from the points (10) of the point cloud (11) is determined in the respective segment (15), wherein the respective selection point (9) in the segment (15) has the lowest distance to the reference point (14) compared to the other points (10) of the point cloud (11) in the segment (15). The respective boundary (8) of the at least one object (7) is determined based on the respectively determined selection points (9).

IPC 8 full level

G06K 9/00 (2006.01); **G06K 9/32** (2006.01)

CPC (source: EP US)

G06V 10/255 (2022.01 - EP US); **G06V 20/58** (2022.01 - EP US)

Citation (search report)

See references of WO 2015176933A1

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 102014007565 A1 20151126; EP 3146462 A1 20170329; WO 2015176933 A1 20151126

DOCDB simple family (application)

DE 102014007565 A 20140522; EP 15722677 A 20150429; EP 2015059400 W 20150429