

Title (en)

LIDAR SENSOR FOR OPTICALLY DETECTING A FIELD OF VIEW AND METHOD FOR DRIVING A LIDAR SENSOR

Title (de)

LIDAR-SENSOR ZUR OPTISCHEN ERFASSUNG EINES SICHTFELDES UND VERFAHREN ZUR ANSTEUERUNG EINES LIDAR-SENSORS

Title (fr)

CAPTEUR LIDAR POUR L'ENREGISTREMENT OPTIQUE D'UN CHAMP DE VISION ET PROCÉDÉ POUR LA COMMANDE DU CAPTEUR LIDAR

Publication

EP 3953735 A1 20220216 (DE)

Application

EP 20712938 A 20200319

Priority

- DE 102019205243 A 20190411
- EP 2020057613 W 20200319

Abstract (en)

[origin: WO2020207740A1] A LIDAR sensor (100) for optically detecting a field of view, comprising a transmitter unit with at least one light source (101, 101-1, 101-2) for generating and outputting primary light into a first angular range (111) of the field of view; a deflection unit (105), which is rotatable and/or swivelable about an axis of rotation (106), for deflecting primary light incident on the deflection unit (105) into a second angular range (505) of the field of view; and a receiver unit (110) with at least one detector unit (204) for receiving secondary light, which was reflected and/or scattered by an object in the field of view; wherein the first angular range (111) extends in a plane disposed parallel to the axis of rotation (106) of the deflection unit (105); and wherein the transmitter unit is embodied to output the primary light as a first transmission beam (102-1) with two marginal rays (103-1, 103-2) and as at least one second transmission beam (102-2) with two marginal rays (104-1, 104-2) into at least two portions (111-1, 111-2) of the first angular range (111); and wherein the transmitter unit is furthermore embodied to output the first transmission beam (102-1) in such a way that the first marginal ray (103-1) of the first transmission beam (102-1) is incident on a first edge region (112-1) of a surface of the deflection unit (105); and to output at least one second transmission beam (102-2) in such a way that the first marginal ray (104-1) of this second transmission beam (102-2) is incident on a second edge region (112-2) of the surface of the deflection unit (105) lying opposite the first edge region.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2020207740A1

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