

Title (en)

3-D SENSOR SYSTEM HAVING SCENE LIGHTING THAT DEPENDS ON A SOLID ANGLE

Title (de)

3D SENSORSYSTEM MIT EINER VON EINEM RAUMWINKEL ABHÄNGIGEN SZENENBELEUCHTUNG

Title (fr)

SYSTÈME DE DÉTECTION 3D MUNI D'UN ÉCLAIRAGE DE SCÈNE FONCTION D'UN ANGLE SOLIDE

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Application

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Abstract (en)

[origin: WO2019115559A1] The invention relates to a sensor system (100) and to a method for three-dimensionally sensing a scene (190). The sensor system (100) comprises: (a) a lighting device (130) for lighting the scene (190) with illuminating light (131); (b) a measuring device (110) for receiving measurement light (196), which is illuminating light (131) at least partially backscattered by at least one object (195) contained in the scene, and for measuring distances between the sensor system (100) and the at least one object (195) on the basis of the light propagation time of the illuminating light (131) and of the measurement light (196); and (c) a data-processing device (150) connected downstream of the measuring device (110), for determining the three-dimensional characteristic of the scene (190) on the basis of the measured distances. The lighting device (130) is configured in such a way that a lighting intensity of the illuminating light (131) depends on the solid angle of the beam path of the illuminating light (131), such that a distance-based intensity loss of the illuminating light (131) and of the measurement light (196) is at least partially compensated. The invention further relates to different uses of a sensor system (100) of this type.

IPC 8 full level

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Citation (search report)

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