

Title (en)

METHOD AND A PROCESSING UNIT FOR DETERMINING CALIBRATION PARAMETERS FOR A CALIBRATION FUNCTION OF A HEAD-MOUNTED DEVICE (HMD) FOR USE IN A VEHICLE AND HMD COMPRISING SUCH A CALIBRATION FUNCTION

Title (de)

VERFAHREN UND RECHENEINHEIT ZUR ERMITTLUNG VON KALIBRIERPARAMETERN FÜR EINE KALIBRIERFUNKTION EINES KOPFMONTIERTEN GERÄTS (HMD) IN EINEM FAHRZEUG UND HMD MIT EINER SOLCHEN KALIBRIERFUNKTION

Title (fr)

PROCÉDÉ ET UNITÉ DE TRAITEMENT POUR DÉTERMINER DES PARAMÈTRES D'ÉTALONNAGE POUR UNE FONCTION D'ÉTALONNAGE D'UN DISPOSITIF MONTÉ SUR LA TÊTE (HMD) DESTINÉ À ÊTRE UTILISÉ DANS UN VÉHICULE ET HMD COMPRENANT UNE TELLE FONCTION D'ÉTALONNAGE

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Application

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Abstract (en)

[origin: WO2022188975A1] The invention is concerned with a method for determining calibration parameters for a calibration function (37) of a head-mounted device, HMD, for use in a (10) vehicle, wherein an inertial measurement unit, IMU, of the HMD generates at least one HMD sensor signal (20) and from the at least one HMD sensor signal (20) a respective HMD angle value (21) for roll and/or pitch and/or yaw of the HMD is determined and updated over time. While in the vehicle (10) the HMD is held in a mounting position (26) that is fixed with regard to the vehicle (10) and while the vehicle (10) performs at least one test drive a respective vehicle sensor signal (13) of at least one vehicle sensor (18) of a localization module (12) of the vehicle (10) and/or a respective vehicle angle value (14) for roll and/or pitch and/or yaw of the vehicle (10) derived from the at least one vehicle sensor signal (13) is recorded and at the same time the at least one HMD sensor signal (20) and/or the at least one HMD angle value (21) is recorded and a processing unit (19) determines a drift (32) of the respective HMD angle value (21) by comparing the recorded signals and/or the recorded angle values.

IPC 8 full level

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