

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

Publication
EP 4291940 A1 20231220 (EN)

Application
EP 21712444 A 20210311

Priority
EP 2021056128 W 20210311

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
G02B 27/01 (2006.01); **B60K 35/00** (2006.01)

CPC (source: EP)
B60K 35/00 (2013.01); **B60K 35/23** (2024.01); **B60K 35/90** (2024.01); **G02B 27/017** (2013.01); **B60K 2360/48** (2024.01); **G02B 2027/0181** (2013.01); **G02B 2027/0183** (2013.01); **G02B 2027/0187** (2013.01)

Citation (search report)
See references of WO 2022188975A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022188975 A1 20220915; EP 4291940 A1 20231220

DOCDB simple family (application)
EP 2021056128 W 20210311; EP 21712444 A 20210311