

Title (en)

METHOD AND DEVICE FOR MAPPING A DEPLOYMENT ENVIRONMENT FOR AT LEAST ONE MOBILE UNIT AND FOR LOCATING AT LEAST ONE MOBILE UNIT IN A DEPLOYMENT ENVIRONMENT, AND LOCATING SYSTEM FOR A DEPLOYMENT ENVIRONMENT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM KARTIEREN EINER EINSATZUMGEBUNG FÜR ZUMINDEST EINE MOBILE EINHEIT SOWIE ZUR LOKALISATION ZUMINDEST EINER MOBILEN EINHEIT IN EINER EINSATZUMGEBUNG UND LOKALISATIONSSYSTEM FÜR EINE EINSATZUMGEBUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR CARTOGRAPHIER UN ENVIRONNEMENT DE DÉPLOIEMENT POUR AU MOINS UNE UNITÉ MOBILE ET POUR LOCALISER AU MOINS UNE UNITÉ MOBILE DANS UN ENVIRONNEMENT DE DÉPLOIEMENT, ET SYSTÈME DE LOCALISATION POUR UN ENVIRONNEMENT DE DÉPLOIEMENT

Publication

**EP 4229597 A1 20230823 (DE)**

Application

**EP 21793924 A 20211015**

Priority

- DE 102020213151 A 20201019
- EP 2021078613 W 20211015

Abstract (en)

[origin: WO2022084182A1] The invention relates to a method for providing mapping data (160) for a map (170) of a deployment environment (100) for at least one mobile unit (120), said method comprising the steps of reading reference image data from an interface of image capture device (122) of the mobile unit (120). The reference image data represent a plurality of reference images which are recorded by means of the image capture device (122) from portions (104) of a ground surface (102) of the deployment environment (100) that are specific to each reference image, with adjacent portions (104) overlapping in part. A plurality of reference image features is extracted for each reference image with use of the reference image data. Positions of the reference image features in each reference image are determined by means of a random process or in accordance with a predefined distribution schema. To generate mapping data (160), a reference feature descriptor is determined at the position of each reference image feature with use of the reference image data. The mapping data (160) comprises the reference image data, the positions of the reference image features and the reference feature descriptors.

IPC 8 full level

**G06T 7/73** (2017.01)

CPC (source: EP US)

**G01C 21/3837** (2020.08 - US); **G06T 7/73** (2016.12 - EP); **G06T 7/74** (2016.12 - US); **G06T 2207/20212** (2013.01 - US);  
**G06T 2207/30244** (2013.01 - EP US); **G06T 2207/30252** (2013.01 - US); **G06T 2207/30256** (2013.01 - EP)

Citation (search report)

See references of WO 2022084182A1

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 2022084182 A1 20220428**; CN 116324886 A 20230623; DE 102020213151 A1 20220421; EP 4229597 A1 20230823;  
US 2024029299 A1 20240125

DOCDB simple family (application)

**EP 2021078613 W 20211015**; CN 202180071140 A 20211015; DE 102020213151 A 20201019; EP 21793924 A 20211015;  
US 202118044494 A 20211015