

Title (en)

METHOD AND APPARATUS FOR PRODUCING A LANE-ACCURATE ROAD MAP

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERSTELLUNG EINER FAHRSPURGENAUEN STRÄßENKARTE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE CRÉATION D'UNE CARTE ROUTIÈRE PRÉCISE EN TERMES DE VOIE DE ROULEMENT

Publication

EP 3631364 A1 20200408 (DE)

Application

EP 18713229 A 20180323

Priority

- DE 102017209346 A 20170601
- EP 2018057506 W 20180323

Abstract (en)

[origin: WO2018219522A1] A method for producing a lane-accurate road map (22) is proposed. The method has a step of providing a digital lane-accurate road map (14), a step of providing a trajectory data record (16) and a step of identifying at least one road (17) while segmenting the lane-accurate road map (14) into at least one road segment (26). Further, the method has a step of modelling the road segment (26) in at least one road model (28), wherein the road model (28) has parameters (L, W, G, C) for describing lanes (23) of the road (17). Further, the method has a step of randomly varying parameter values of at least some of the parameters (L, W, G, C) of the road model (28) by randomly selecting a change operation (40, 41, 42, 43, 44, 46, 48, 50) of the road model (28) and a step of assigning at least some of the trajectory data (27) of the trajectory data record (16) to the road model (28) while ascertaining at least one probability value for the road model (28). Based on the ascertained at least one probability value, optimum parameter values of the road model (28) are ascertained and, based thereon, a lane-accurate road map (22) is produced that can be distinguished in particular by a high level of accuracy.

IPC 8 full level

G01C 21/32 (2006.01); **G01C 7/04** (2006.01)

CPC (source: EP KR US)

G01C 7/04 (2013.01 - KR); **G01C 21/20** (2013.01 - KR US); **G01C 21/367** (2013.01 - KR US); **G01C 21/3815** (2020.08 - EP);
G01C 21/3819 (2020.08 - EP US); **G01C 21/3822** (2020.08 - EP US); **G01C 21/3841** (2020.08 - EP KR); **G01C 21/3863** (2020.08 - EP);
G06T 5/70 (2024.01 - KR US); **G06V 20/588** (2022.01 - US); **G01C 7/04** (2013.01 - EP); **G06T 2207/30256** (2013.01 - KR US)

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

DOCDB simple family (publication)

WO 2018219522 A1 20181206; CN 111065893 A 20200424; DE 102017209346 A1 20190110; EP 3631364 A1 20200408;
JP 2020524295 A 20200813; KR 20200012960 A 20200205; US 2020132476 A1 20200430

DOCDB simple family (application)

EP 2018057506 W 20180323; CN 201880036146 A 20180323; DE 102017209346 A 20170601; EP 18713229 A 20180323;
JP 2019566326 A 20180323; KR 20197038750 A 20180323; US 201816617774 A 20180323