

Title (en)  
METHOD FOR LOCALISING A MORE HIGHLY AUTOMATED, E.G. HIGHLY AUTOMATED VEHICLE (HAV) IN A DIGITAL LOCALISATION MAP

Title (de)  
VERFAHREN ZUR LOKALISIERUNG EINES HÖHER AUTOMATISIERTEN, Z.B. HOCHAUTOMATISIERTEN FAHRZEUGS (HAF) IN EINER DIGITALEN LOKALISIERUNGSKARTE

Title (fr)  
PROCÉDÉ DE LOCALISATION D'UN VÉHICULE À FORTE AUTOMATISATION, PAR EX. UN VÉHICULE ENTIÈREMENT AUTOMATISÉ (HAF), DANS UNE CARTE DE LOCALISATION NUMÉRIQUE

Publication  
**EP 3577419 A1 20191211 (DE)**

Application  
**EP 17822212 A 20171212**

Priority  
• DE 102017201663 A 20170202  
• EP 2017082432 W 20171212

Abstract (en)  
[origin: WO2018141447A1] The invention relates to a method for localising a highly automated vehicle (HAV) in a digital localisation map, comprising the steps: S1 sensing features of semi-static objects in an environment of the HAV by means of at least one first sensor; S2 transmitting the features of the semi-static objects and the vehicle position to an evaluation unit; S3 classifying the semi-static objects, the semi-static objects being assigned the feature "semi-static" as the result of the classification; S4 passing the features of the semi-static objects to a local environment model of the HAV, a check being performed during creation of the local environment model as to whether landmarks suitable for localising the HAV are concealed by the semi-static objects in relation to the position and/or an approach trajectory of the HAV; S5 transmitting the local environment map to the HAV in the form of a digital localisation map, the digital localisation map only containing the landmarks suitable for localising the HAV which are not concealed by semi-static objects in relation to the position and/or an approach trajectory of the HAV; and S6 localising the HAV using the digital localisation map. The invention also relates to a corresponding system and to a computer program.

IPC 8 full level  
**G01C 21/00** (2006.01); **G01C 21/04** (2006.01); **G01C 21/12** (2006.01); **G01C 21/16** (2006.01); **G01C 21/26** (2006.01); **G01C 21/30** (2006.01); **G01S 11/12** (2006.01); **G01S 13/06** (2006.01); **G05D 1/02** (2006.01)

CPC (source: EP US)  
**G01C 21/28** (2013.01 - EP); **G01C 21/30** (2013.01 - US); **G01S 11/12** (2013.01 - EP); **G01S 13/06** (2013.01 - EP US); **G05D 1/0274** (2024.01 - EP US); **G06V 20/584** (2022.01 - 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)  
**DE 102017201663 A1 20180802**; CN 110249205 A 20190917; EP 3577419 A1 20191211; JP 2020506387 A 20200227; JP 6910452 B2 20210728; US 11120281 B2 20210914; US 2020005058 A1 20200102; WO 2018141447 A1 20180809

DOCDB simple family (application)  
**DE 102017201663 A 20170202**; CN 201780085473 A 20171212; EP 17822212 A 20171212; EP 2017082432 W 20171212; JP 2019541759 A 20171212; US 201716480231 A 20171212