

Title (en)

REAL TIME MACHINE VISION AND POINT-CLOUD ANALYSIS FOR REMOTE SENSING AND VEHICLE CONTROL

Title (de)

ECHTZEITMASCHINENVISION UND PUNKTWOLKENANALYSE ZUR ENTFERNTEN MESSUNG UND FAHRZEUGSTEUERUNG

Title (fr)

VISION INDUSTRIELLE ET ANALYSE DE NUAGE DE POINTS EN TEMPS RÉEL POUR LA TÉLÉDÉTECTION ET LA COMMANDE DE VÉHICULE

Publication

**EP 3248140 A4 20181205 (EN)**

Application

**EP 16740714 A 20160120**

Priority

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Abstract (en)

[origin: WO2016118672A2] Methods and apparatus for real time machine vision and point-cloud data analysis are provided, for remote sensing and vehicle control. Point cloud data can be analyzed via scalable, centralized, cloud computing systems for extraction of asset information and generation of semantic maps. A data storage / preprocessor (1220) subdivides a data set for streaming to a distributed processing unit (1240) and operation via data analysis mechanisms (1250). The output of the processing unit (1240) is aggregated by a map generator (1230). Machine learning components can optimize data analysis mechanisms to improve asset and feature extraction from sensor data. Optimized data analysis mechanisms can be downloaded to vehicles for use in on-board systems analyzing vehicle sensor data. Semantic map data can be used locally in vehicles, along with onboard sensors, to derive precise vehicle localization and provide input to vehicle to control systems.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [A] SOTIRIS BRAKATSOULAS ET AL: "On map-matching vehicle tracking data", PROCEEDINGS OF THE 31ST VLDB CONFERENCE, ACM, US, 30 August 2005 (2005-08-30), pages 853 - 864, XP058194052, ISBN: 978-1-59593-154-2
- See references of WO 2016118672A2

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