

Title (en)

SYSTEMS AND METHODS FOR IMPROVEMENTS IN SCANNING AND MAPPING

Title (de)

SYSTEME UND VERFAHREN ZUR VERBESSERUNG DER ABTASTUNG UND ABBILDUNG

Title (fr)

SYSTÈMES ET PROCÉDÉS D'AMÉLIORATIONS DE BALAYAGE ET DE MISE EN CORRESPONDANCE

Publication

**EP 3646058 A4 20201202 (EN)**

Application

**EP 18824609 A 20180629**

Priority

- US 201762527341 P 20170630
- US 2017055938 W 20171010
- US 2018015403 W 20180126
- US 2018040269 W 20180629

Abstract (en)

[origin: WO2019006289A1] A method of pose calculation for a portable three-dimensional scanning device including a first sensor and a second sensor the method including utilizing data from the first sensor and data from the second sensor to acquire data defining six degrees of freedom of the scanning device to optimize a first pose calculation, receiving data comprising one of data from the first sensor and data from the second sensor, selecting a subset of the six degrees of freedom of the scanning device, utilizing the IMU data and the received data for the selected subset of six degrees of freedom to optimize a second pose, wherein the unselected degrees of freedom are retained from the first pose and storing received data associated with the second camera pose in a point cloud database.

IPC 8 full level

**G01S 17/42** (2006.01); **G01C 21/16** (2006.01); **G01S 7/48** (2006.01); **G01S 17/50** (2006.01); **G01S 17/86** (2020.01); **G01S 17/89** (2020.01); **G06T 7/20** (2017.01); **G06T 7/30** (2017.01); **G06T 7/579** (2017.01)

CPC (source: EP US)

**G01C 21/165** (2013.01 - EP); **G01S 7/4808** (2013.01 - EP); **G01S 17/42** (2013.01 - EP US); **G01S 17/86** (2020.01 - EP); **G01S 17/89** (2013.01 - EP US); **G06T 7/20** (2013.01 - EP); **G06T 7/579** (2016.12 - EP); **G06T 2207/10028** (2013.01 - EP); **G06T 2207/30244** (2013.01 - EP)

Citation (search report)

- [E] WO 2018140701 A1 20180802 - KAARTA INC [US]
- [XP] WO 2018071416 A1 20180419 - KAARTA INC [US]
- [XI] WO 2014048475 A1 20140403 - METAIO GMBH [DE], et al
- [X] WO 2014130854 A1 20140828 - UNIVESITY OF MINNESOTA [US]
- See references of WO 2019006289A1

Cited by

US11398075B2; US11830136B2; US11815601B2; US11573325B2; US12014533B2; US10962370B2; US10989542B2; US11506500B2; US11585662B2

Designated contracting state (EPC)

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