

Title (en)

GUIDEWAY MOUNTED VEHICLE LOCALIZATION SYSTEM

Title (de)

ORTUNGSSYSTEM FÜR AUF FÜHRUNGSBAHN MONTIERTES FAHRZEUG

Title (fr)

SYSTÈME DE LOCALISATION D'UN VÉHICULE MONTÉ SUR VOIE DE GUIDAGE

Publication

EP 3265361 B1 20190904 (EN)

Application

EP 16758529 A 20160301

Priority

- US 201514639290 A 20150305
- IB 2016051132 W 20160301

Abstract (en)

[origin: WO2016139580A1] A system comprises a speed detector, a marker sensor, a controller, a sensor unit, and a processor. The speed detector is configured to generate speed data associated with a movement of a vehicle. The marker sensor is configured to generate marker data based on a detection of an object along a wayside of a guideway. The controller is configured to calculate a distance the vehicle moved, generate location information, and generate an indication the vehicle is stationary. The sensor unit comprises an accelerometer, a gyroscope, and a magnetometer. The sensor unit is configured to generate sensor data based on information gathered by one or more of the accelerometer, the gyroscope, or the magnetometer. The processor is configured to process the sensor data to determine a vehicle position based on the sensor data and the location information. The controller is further configured to compare the location information with the vehicle position.

IPC 8 full level

B61L 27/00 (2006.01); **B61L 25/02** (2006.01); **G01C 21/14** (2006.01)

CPC (source: EP)

B61L 15/0062 (2024.01); **B61L 23/041** (2013.01); **B61L 25/021** (2013.01); **B61L 25/025** (2013.01); **B61L 25/026** (2013.01); **B61L 25/028** (2013.01); **B61L 27/40** (2022.01)

Citation (opposition)

Opponent : Siemens Mobility GmbH,

- US 2004140405 A1 20040722 - MEYER THOMAS J [US]
- EP 0605848 A1 19940713 - UNION SWITCH & SIGNAL INC [US]
- US 2009187294 A1 20090723 - JAMES DEMETRI [US]
- US 5774824 A 19980630 - STREIT DONALD A [US], et al
- US 5902351 A 19990511 - STREIT DONALD A [US], et al
- LUISA D FAIRFAX, FRESCONI, FRANK: "Position Estimation for Projectiles Using Low-Cost Sensors and Flight Dynamics", ARMY RESEARCH LABORATORY, 1 April 2012 (2012-04-01), pages 1 - 38, XP055755959
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CN110775105A; EP4061688A4; US11945478B2; DE102022212227A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2016139580 A1 20160909; CA 2977730 A1 20160909; CA 2977730 C 20180403; EP 3265361 A1 20180110; EP 3265361 A4 20180829; EP 3265361 B1 20190904; EP 3594086 A2 20200115; EP 3594086 A3 20200506

DOCDB simple family (application)

IB 2016051132 W 20160301; CA 2977730 A 20160301; EP 16758529 A 20160301; EP 19195002 A 20160301