

Title (en)

AUTONOMOUS VEHICLE: OBJECT-LEVEL FUSION

Title (de)

AUTONOMES FAHRZEUG: OBJEKTEBENENFUSION

Title (fr)

VÉHICULE AUTONOME : COMBINAISON DE NIVEAU OBJET

Publication

EP 3516467 A1 20190731 (EN)

Application

EP 16790768 A 20160929

Priority

US 2016054423 W 20160929

Abstract (en)

[origin: WO2018063241A1] Previous self-driving car systems can detect objects separately with either vision systems, RADAR systems or LIDAR systems. In an embodiment of the present invention, an object fusion module normalizes sensor output from vision, RADAR, and LIDAR systems into a common format. Then, the system fuses the object-level sensor data across all systems by associating all objects detected and predicting tracks for all objects. The present system improves over previous systems by using the data from all sensors combined to develop a single set of knowledge about the objects around the self-driving car, instead of each sensor operating separately.

IPC 8 full level

G05D 1/00 (2006.01); **G05D 1/02** (2006.01)

CPC (source: EP)

G01S 7/4802 (2013.01); **G01S 13/865** (2013.01); **G01S 13/867** (2013.01); **G01S 13/931** (2013.01); **G01S 17/931** (2020.01);
G05D 1/0088 (2024.01); **G01S 13/723** (2013.01)

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 2018063241 A1 20180405; EP 3516467 A1 20190731; JP 2019530608 A 20191024

DOCDB simple family (application)

US 2016054423 W 20160929; EP 16790768 A 20160929; JP 2019517953 A 20160929