

Title (en)

METHOD, SYSTEM AND TRACK-BOUND VEHICLE, IN PARTICULAR RAIL VEHICLE, FOR RECOGNIZING OBSTACLES IN TRACK-BOUND TRAFFIC, IN PARTICULAR IN RAIL TRAFFIC

Title (de)

VERFAHREN, VORRICHTUNG UND BAHNFAHRZEUG, INSbesondere SCHIENENFAHRZEUG, ZUR HINDERNISERKENNUNG IM BAHNVERKEHR, INSbesondere IM SCHIENENVERKEHR

Title (fr)

PROCÉDÉ, DISPOSITIF ET VÉHICULE SUR VOIE, NOTAMMENT VÉHICULE FERROVIAIRE, POUR LA DÉTECTION D'OBSTACLE DANS LE TRANSPORT SUR VOIE, EN PARTICULIER LE TRANSPORT FERROVIAIRE

Publication

EP 3523177 A2 20190814 (DE)

Application

EP 17832743 A 20171207

Priority

- DE 1020162224344 A 20161207
- EP 2017081834 W 20171207

Abstract (en)

[origin: WO2018104454A2] The invention relates to the automatic recognition of obstacles in track-bound traffic (BVE), when track-bound vehicles (BFZ) travel on lines (BST) in a track-bound vehicle network (BNE), or obstacles in rail traffic (SVE), when rail vehicles (SFZ) travel on rail tracks (SST) in a rail network (SNE). For this purpose, a plurality of images (BIFSB) of a route region (FSB) ahead of a track-bound vehicle (BFZ, SFZ) is used, an image region (BIB) is marked in each image and shows a track (FS, GL) used by the track-bound vehicle (BFZ, SFZ), and the track visually localized by the marking is identified by image analysis and is compared with stored known image meta information (BMI) or with stored known image meta information (BMI) and additional information (ZI). The system is capable of recognizing, by way of an object recognition method, in an image region sub-region (BIBAS) of the marked image region whether an object (OBJ), such as a person, an animal, a fallen tree etc., is present on the track (FS, GL), an obstacle being marked in the image region (BIB), preferably in the image sub-region (BIBAS), when the object (OBJ) is recognized by the object recognition method.

IPC 8 full level

B61L 23/04 (2006.01)

CPC (source: EP RU)

B61L 23/041 (2013.01 - EP RU)

Citation (search report)

See references of WO 2018104454A2

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 2018104454 A2 20180614; WO 2018104454 A3 20180823; CN 110087970 A 20190802; EP 3523177 A2 20190814;
RU 2719499 C1 20200420

DOCDB simple family (application)

EP 2017081834 W 20171207; CN 201780075914 A 20171207; EP 17832743 A 20171207; RU 20191119851 A 20171207