Title (en)

SYSTEM FOR REAL-TIME OBJECT DETECTION AND RECOGNITION USING BOTH IMAGE AND SIZE FEATURES

Title (de)

SYSTEM ZUR ECHTZEIT-OBJEKTDETEKTION UND -ERKENNUNG MIT SOWOHL BILD- ALS AUCH GRÖSSENMERKMALEN

Title (fr)

SYSTÈME DE DÉTECTION ET DE RECONNAISSANCE D'OBJETS EN TEMPS RÉEL À L'AIDE DE CARACTÉRISTIQUES D'IMAGE ET DE TAILLE

Publication

EP 3782075 A4 20211229 (EN)

Application

EP 19789101 A 20190214

Priority

- US 201862659100 P 20180417
- US 2019018119 W 20190214

Abstract (en)

[origin: WO2019203921A1] Described is an object recognition system. Using an integral channel features (ICF) detector, the system extracts a candidate target region (having an associated original confidence score representing a candidate object) from an input image of a scene surrounding a platform. A modified confidence score is generated based on a location and height of detection of the candidate object. The candidate target regions are classified based on the modified confidence score using a trained convolutional neural network (CNN) classifier, resulting in classified objects. The classified objects are tracked using a multi-target tracker for final classification of each classified object as a target or non-target. If the classified object is a target, a device can be controlled based on the target.

IPC 8 full level

G06N 3/04 (2006.01); **G06N 3/08** (2006.01); **G06T 7/11** (2017.01); **G06T 7/292** (2017.01); **G06V 10/143** (2022.01); **G06V 10/145** (2022.01); **G06V 10/25** (2022.01); G06V 20/13 (2022.01)

CPC (source: EP US)

G06F 18/24133 (2023.01 - EP); **G06F 18/24143** (2023.01 - EP); **G06F 18/24323** (2023.01 - EP); **G06F 18/254** (2023.01 - EP); **G06N 3/045** (2023.01 - EP); **G06N 3/047** (2023.01 - EP); **G06N 3/08** (2013.01 - EP US); **G06V 10/143** (2022.01 - EP US); **G06V 10/145** (2022.01 - EP US); **G06V 10/25** (2022.01 - EP US); **G06V 10/454** (2022.01 - EP US); **G06V 10/507** (2022.01 - EP US); **G06V 10/82** (2022.01 - EP US); **G06V 20/58** (2022.01 - EP US); G06V 20/13 (2022.01 - EP US); G06V 20/52 (2022.01 - EP US)

Citation (search report)

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- See also references of WO 2019203921A1

Designated contracting state (EPC)

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