Title (en)

DEEP LEARNING-BASED STORE REALOGRAMS

Title (de)

AUF TIEFENLERNEN BASIERTE SPEICHERREALOGRAMME

Title (fr)

RÉALOGRAMMES DE MAGASIN BASÉS SUR UN APPRENTISSAGE PROFOND

Publication

EP 3827391 A4 20220406 (EN)

Application

EP 19840680 A 20190725

Priority

- US 201862703785 P 20180726
- US 201916256355 A 20190124
- US 2019043522 W 20190725

Abstract (en)

[origin: WO2020023798A1] Systems and techniques are provided for tracking inventory items in an area of real space. A plurality of cameras, or other sensors, produce respective sequences of images in corresponding fields of view in the real space. The field of view of each camera overlaps with the field of view of at least one other camera. The system is coupled to the plurality of cameras and uses the sequences of images produced by at least two cameras in the plurality of cameras to identify inventory events. The inventory event includes an item identifier, a location and a timestamp. A plurality of cells having coordinates in the area of real space are stored as a data set in the memory. The processing system calculates scores at a scoring time, for inventory items having locations matching particular cells using respective counts of inventory events.

IPC 8 full level

G06Q 10/08 (2012.01); **G06N 3/04** (2006.01); **G06N 3/08** (2006.01); **G06N 5/00** (2006.01); **G06Q 30/06** (2012.01); **G06T 7/20** (2017.01); **G06T 7/70** (2017.01); **G06V 10/82** (2022.01); **G06V 20/52** (2022.01); **G06V 40/10** (2022.01); **G06V 40/16** (2022.01); **G06V 40/20** (2022.01)

CPC (source: EP)

G06N 3/045 (2023.01); **G06Q 10/087** (2013.01); **G06V 10/82** (2022.01); **G06V 20/52** (2022.01); **G06V 40/107** (2022.01); **G06V 40/173** (2022.01); **G06V 40/20** (2022.01); G06N 3/08 (2013.01); G06N 5/01 (2023.01); G06Q 30/06 (2013.01)

Citation (search report)

- [I] US 2013182114 A1 20130718 - ZHANG ZHONG [US], et al
- See references of WO 2020023798A1

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

DOCDB simple family (publication)

WO 2020023798 A1 20200130; CA 3107446 A1 20200130; EP 3827391 A1 20210602; EP 3827391 A4 20220406; JP 2021533449 A 20211202; JP 7228671 B2 20230224; TW 202013240 A 20200401; TW I779219 B 20221001

DOCDB simple family (application)

US 2019043522 W 20190725; CA 3107446 A 20190725; EP 19840680 A 20190725; JP 2021504467 A 20190725; TW 108126624 A 20190726