

Title (en)

PREDICTING INVENTORY EVENTS USING FOREGROUND/BACKGROUND PROCESSING

Title (de)

VORHERSAGE VON INVENTAREREIGNISSEN UNTER VERWENDUNG VON VORDERGRUND-/HINTERGRUNDVERARBEITUNG

Title (fr)

PRÉDICTION D'ÉVÉNEMENTS D'INVENTAIRE AU MOYEN D'UN TRAITEMENT D'AVANT-PLAN/ARRIÈRE-PLAN

Publication

**EP 3665647 A4 20210106 (EN)**

Application

**EP 18843486 A 20180726**

Priority

- US 201762542077 P 20170807
- US 201715847796 A 20171219
- US 201815907112 A 20180227
- US 201815945466 A 20180404
- US 201815945473 A 20180404
- US 2018043939 W 20180726

Abstract (en)

[origin: WO2019032307A1] Systems and techniques are provided for tracking puts and takes of inventory items by subjects in an area of real space. A plurality of cameras with overlapping fields of view produce respective sequences of images of corresponding fields of view in the real space. In one embodiment, the system includes first image processors, including subject image recognition engines, receiving corresponding sequences of images from the plurality of cameras. The first image processors process images to identify subjects represented in the images in the corresponding sequences of images. The system includes second image processors, including background image recognition engines, receiving corresponding sequences of images from the plurality of cameras. The second image processors mask the identified subjects to generate masked images. Following this, the second image processors process the masked images to identify and classify background changes represented in the images in the corresponding sequences of images.

IPC 8 full level

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CPC (source: EP US)

**G06F 18/24143** (2023.01 - EP); **G06N 3/045** (2023.01 - EP); **G06N 3/084** (2013.01 - EP); **G06Q 10/087** (2013.01 - EP); **G06Q 20/20** (2013.01 - EP); **G06Q 20/203** (2013.01 - EP US); **G06Q 20/208** (2013.01 - EP); **G06Q 30/02** (2013.01 - EP); **G06Q 30/06** (2013.01 - EP); **G06V 10/454** (2022.01 - EP US); **G06V 10/82** (2022.01 - EP US); **G06V 20/52** (2022.01 - EP US); **G07G 1/0054** (2013.01 - EP); **H04N 17/002** (2013.01 - EP); **H04N 23/90** (2023.01 - EP)

Citation (search report)

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- [A] US 9262681 B1 20160216 - MISHRA PRAGYANA K [US]
- [A] US 2013011049 A1 20130110 - KIMURA JUN [JP]
- [X] CAMPLANI MASSIMO ET AL: "Background foreground segmentation with RGB-D Kinect data: An efficient combination of classifiers", JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION, ACADEMIC PRESS, INC, US, vol. 25, no. 1, 27 March 2013 (2013-03-27), pages 122 - 136, XP028804219, ISSN: 1047-3203, DOI: 10.1016/J.JVCIR.2013.03.009
- See references of WO 2019032307A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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