

Title (en)  
ATTRIBUTE AWARE ZERO SHOT MACHINE VISION SYSTEM VIA JOINT SPARSE REPRESENTATIONS

Title (de)  
ATTRIBUTBEWUSSTES ZERO-SHOT-MASCHINENSICHTSYSTEM ÜBER JOINT-SPARSE-REPRÄSENTATIONEN

Title (fr)  
SYSTÈME VISIONIQUE SANS PRISE DE VUE SENSIBLE AUX ATTRIBUTS PAR L'INTERMÉDIAIRE DE REPRÉSENTATIONS ÉPARSES COMMUNES

Publication  
**EP 3682370 A4 20210609 (EN)**

Application  
**EP 18856563 A 20180712**

Priority  
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• US 2018041806 W 20180712

Abstract (en)  
[origin: WO2019055114A1] Described is a system for object recognition. The system generates a training image set of object images from multiple image classes. Using a training image set and annotated semantic attributes, a model is trained that maps visual features from known images to the annotated semantic attributes using joint sparse representations with respect to dictionaries of visual features and semantic attributes. The trained model is used for mapping visual features of an unseen input image to its semantic attributes. The unseen input image is classified as belonging to an image class, and a device is controlled based on the classification of the unseen input image.

IPC 8 full level  
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CPC (source: EP US)  
**G06F 18/21345** (2023.01 - EP); **G06V 20/56** (2022.01 - EP US); **G06V 20/70** (2022.01 - EP US); **G06V 2201/10** (2022.01 - EP)

Citation (search report)  
• [A] US 2003202683 A1 20031030 - MA YUE [US], et al  
• [I] KODIROV ELYOR ET AL: "Unsupervised Domain Adaptation for Zero-Shot Learning", 2015 IEEE INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV), IEEE, 7 December 2015 (2015-12-07), pages 2452 - 2460, XP032866587, DOI: 10.1109/ICCV.2015.282  
• [A] HAMED HABIBI AGHDAM ET AL: "A Unified Framework for Coarse-to-Fine Recognition of Traffic Signs using Bayesian Network and Visual Attributes :", PROCEEDINGS OF THE 10TH INTERNATIONAL CONFERENCE ON COMPUTER VISION THEORY AND APPLICATIONS, 1 January 2015 (2015-01-01), pages 87 - 96, XP055757210, ISBN: 978-989-7580-91-8, DOI: 10.5220/0005303500870096  
• See also references of WO 2019055114A1

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