Title (en)

POLARIZATION-BASED DETECTION AND MAPPING METHOD AND SYSTEM

Title (de)

POLARISATIONSABHÄNGIGES ERFASSUNGS- UND KARTIERUNGSVERFAHREN UND -SYSTEM

Title (fr)

PROCÉDÉ ET SYSTÈME DE DÉTECTION ET DE CARTOGRAPHIE BASÉS SUR UNE POLARISATION

Publication

EP 3631391 A4 20210421 (EN)

Application

EP 18763860 A 20180305

Priority

- US 201715450948 A 20170306
- US 2018020927 W 20180305

Abstract (en)

[origin: WO2018165027A1] A method for detecting and tracking aerial objects and vehicles comprises recording raw image data using a polarimeter to obtain polarized images of the sky. The images are then corrected for non-uniformity, optical distortion, and registration. IR and polarization data products are computed, and the resultant data products are converted to a multi-dimensional data set for exploitation. Contrast enhancement algorithms are applied to the multi-dimensional imagery to form enhanced object images. The enhanced object images may then be displayed to a user, and/or an annunciator may announce the presence of an object.

IPC 8 full level

G01J 4/04 (2006.01); **G06V 20/13** (2022.01); **G01J 5/58** (2006.01); **G02B 5/30** (2006.01); **G06V 10/147** (2022.01)

CPC (source: EP US)

G06V 10/147 (2022.01 - EP US); **G06V 20/13** (2022.01 - EP US); **G06V 20/58** (2022.01 - EP US)

Citation (search report)

- [I] US 2016307053 A1 20161020 - AYCOCK TODD M [US], et al
- [A] EP 2905590 A1 20150812 - BOEING CO [US]
- [A] CHUN C S L ET AL: "POLARIZATION-SENSITIVE THERMAL IMAGING", PROCEEDINGS OF SPIE, IEEE, US, vol. 2234, 1 January 1994 (1994-01-01), pages 275 - 286, XP000889786, ISBN: 978-1-62841-730-2, DOI: 10.1117/12.181025
- [A] CONNOR BARRY ET AL: "Scene understanding and task optimisation using multimodal imaging sensors and context: a real-time implementation", INFRARED TECHNOLOGY AND APPLICATIONS XXXVII, SPIE, 1000 20TH ST. BELLINGHAM WA 98225-6705 USA, vol. 8012, no. 1, 13 May 2011 (2011-05-13), pages 1 - 9, XP060016819, DOI: 10.1117/12.890207
- See references of WO 2018165027A1

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 2018165027 A1 20180913; AU 2018230648 A1 20191024; EP 3631391 A1 20200408; EP 3631391 A4 20210421

DOCDB simple family (application)

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