

Title (en)
IMAGE PROCESSING METHOD AND METHOD FOR TRACKING MISSILES

Title (de)
VERFAHREN ZUR BILDAUFBEREITUNG UND VERFAHREN ZUR BAHNVERFOLGUNG VON RAKETEN

Title (fr)
TRAITEMENT DE L'IMAGE ET PROCEDE POUR SUIVRE LE TRAJECTOIRE DE MISSILES

Publication
EP 2907105 A2 20150819 (DE)

Application
EP 13794796 A 20131008

Priority
• DE 102012020104 A 20121012
• DE 102012022045 A 20121109
• DE 2013000569 W 20131008

Abstract (en)
[origin: WO2014056473A2] A method for image processing with the following steps: a) capturing image information for a scene as electromagnetic radiation using an optical device (1, 101); b) processing the image information obtained in step a) by means of an image processing device (2, 102) to improve the signal-to-noise ratio in the image information, wherein the processing is performed in the following sub-steps: b1) dividing a raw image containing the image information into lines and columns to create a raster image; b2) overlaying a raster image element with a central raster filter element (22", 122") of a raster filter (22, 122) comprising an odd number of lines and an odd number of columns; b3) determining the brightness values of each of the raster image elements covered by the raster filter (22, 122), wherein apart from the central raster filter element (22", 122") every other raster filter element (22', 122') has an individual light attenuation characteristic; b4) summing the brightness values determined in step b3) to form a total brightness value and assigning this total brightness value to the raster image element covered by the central raster filter element (22", 122"); b5) repeating steps b2) to b4) for all remaining raster image elements; c) generating a resultant image with the same rasterization as the raw image from the individual total brightness values of the raster image elements obtained in step b). A method for tracking the course followed by launched rockets with burning engines providing considerably enhanced precision over the prior art, said method having the following characteristics: a) selecting an observation point to the side beneath the target with particularly good observation conditions, b) tracking using the temperature image of the core engine jet measured by a narrowband multispectral camera with at least three bands.

IPC 8 full level
G06T 5/00 (2006.01); **G06E 3/00** (2006.01); **G06T 5/20** (2006.01); **G06V 20/13** (2022.01)

CPC (source: EP US)
G06T 5/20 (2013.01 - EP US); **G06T 5/70** (2024.01 - EP US); **G06T 7/70** (2017.01 - EP US); **G06T 7/90** (2017.01 - EP US); **G06V 10/255** (2022.01 - EP US); **G06V 20/13** (2022.01 - EP US); **G06V 20/653** (2022.01 - US); **H04N 23/80** (2023.01 - US); **H04N 23/951** (2023.01 - EP); **G06T 2200/28** (2013.01 - US); **G06T 2207/10004** (2013.01 - US); **G06T 2207/10036** (2013.01 - EP US); **G06T 2207/30212** (2013.01 - EP US); **G06V 10/243** (2022.01 - EP US)

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014056473 A2 20140417; **WO 2014056473 A3 20140717**; DE 102012022045 A1 20140417; EP 2907105 A2 20150819; JP 2015537290 A 20151224; JP 6285940 B2 20180228; KR 20150072423 A 20150629; US 2015281572 A1 20151001; US 9300866 B2 20160329

DOCDB simple family (application)
DE 2013000569 W 20131008; DE 102012022045 A 20121109; EP 13794796 A 20131008; JP 2015535987 A 20131008; KR 20157012406 A 20131008; US 201314435020 A 20131008