

Title (en)

DETERMINING COLOR INFORMATION USING A BINARY SENSOR

Title (de)

BESTIMMUNG VON FARBINFORMATIONEN ANHAND EINES BINÄREN SENSORS

Title (fr)

DETERMINATION D'INFORMATIONS COULEURS AU MOYEN D'UN CAPTEUR BINAIRE

Publication

EP 2517179 A4 20140924 (EN)

Application

EP 09852485 A 20091223

Priority

FI 2009051033 W 20091223

Abstract (en)

[origin: WO2011076976A1] 36 Abstract The invention relates to forming an image using binary pixels. Binary pixels are pixels that have only two states, a white state when the pixel is exposed and a black state when the pixel is not exposed. The binary pixels have color filters on top of them, and the setup of color filters may be known to some degree. A setup making use of a statistical approach may be used to determine the color of incoming light to produce output images. Consequently, the approach may be used with the binary pixel array to produce images from the input images that the binary pixel array records.

IPC 8 full level

G06T 9/00 (2006.01); **G06T 1/00** (2006.01); **H04N 1/195** (2006.01); **H04N 1/48** (2006.01); **H04N 25/00** (2023.01)

CPC (source: EP US)

G06T 5/94 (2024.01 - EP); **H04N 1/407** (2013.01 - EP); **H04N 23/12** (2023.01 - EP); **H04N 25/134** (2023.01 - EP US); **H04N 25/702** (2023.01 - US)

Citation (search report)

- [I] FENG YANG ET AL: "Image reconstruction in the gigavision camera", 2009 IEEE 12TH INTERNATIONAL CONFERENCE ON COMPUTER VISION WORKSHOPS, ICCV WORKSHOPS : KYOTO, JAPAN, 27 SEPTEMBER - 4 OCTOBER 2009, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, PISCATAWAY, NJ, 27 September 2009 (2009-09-27), pages 2212 - 2219, XP031664584, ISBN: 978-1-4244-4442-7
- [I] ERIC R. FOSSUM: "Gigapixel Digital Film Sensor (DFS) Proposal", 26 October 2005 (2005-10-26), XP002728346, Retrieved from the Internet <URL:<http://ericfossum.com/Publications/Papers/Gigapixel%20Digital%20Film%20Sensor%20Proposal.pdf>> [retrieved on 20140802]
- [A] ANONYMUS / WIKIPEDIA: "Bayer Filter", 3 February 2009 (2009-02-03), XP002728347, Retrieved from the Internet <URL:https://web.archive.org/web/20090203225442/http://en.wikipedia.org/wiki/Bayer_filter> [retrieved on 20140808]
- [AP] SBAIZ L ET AL: "The gigavision camera", ICASSP, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING - PROCEEDINGS - 2009 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING - PROCEEDINGS, ICASSP 2009 2009 INSTITUTE OF ELECTRICAL AND ELECTRONICS EN, 2009, pages 1093 - 1096, XP002728348, DOI: 10.1109/ICASSP.2009.4959778
- See also references of WO 2011076976A1

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011076976 A1 20110630; AU 2009357162 A1 20120621; AU 2009357162 B2 20140501; BR 112012015718 A2 20160517; CN 102667863 A 20120912; CN 102667863 B 20170329; EP 2517179 A1 20121031; EP 2517179 A4 20140924; EP 3002731 A2 20160406; EP 3002731 A3 20160413; ZA 201205415 B 20131223

DOCDB simple family (application)

FI 2009051033 W 20091223; AU 2009357162 A 20091223; BR 112012015718 A 20091223; CN 200980163082 A 20091223; EP 09852485 A 20091223; EP 15195980 A 20091223; ZA 201205415 A 20120719