

Title (en)
METHOD FOR ENCODING A SEQUENCE OF DIGITIZED IMAGES

Title (de)
VERFAHREN ZUM CODIEREN EINER FOLGE VON DIGITALISIERTEN BILDERN

Title (fr)
PROCÉDÉ POUR CODER UNE SUITE D IMAGES NUMÉRISÉES

Publication
EP 2313864 A1 20110427 (DE)

Application
EP 09781871 A 20090814

Priority

- EP 2009060570 W 20090814
- DE 102008038355 A 20080819
- DE 102008058489 A 20081121

Abstract (en)
[origin: WO2010020592A1] The invention relates to a method for encoding a sequence of digitized images (I1, I2, I3) comprising a plurality of pixels (P, P', P'') having associated pixel values, wherein pixels (P, P', P'') of the images (I1, I2, I3) to be encoded are predicted and wherein the prediction errors resulting from the prediction are encoded. The prediction of a pixel (P, P', P'') to be encoded for at least a part of the pixels (P) to be encoded is done by determining a plurality of trajectories (T, T'), wherein each of the trajectories (T, T') runs through the pixel (P) to be encoded and through other previously encoded pixels (P') from the image (I3) of the pixel (P) to be encoded and/or from one or more images (I1, I2) that are temporally proximate to the image (I3) of the pixel (P) to be encoded. For each of the trajectories (T, T') determined, a valuation parameter is determined that is configured in such a way that the smaller the deviations in the uncoded pixel values (w1, w2) of the other pixels (P') along a trajectory (T, T'), the higher is the trajectory (T, T') evaluated according to the valuation parameter. A prediction value (w) for the pixel value of the pixel (P) to be encoded is determined based on the other pixels (P') of the trajectory (T, T') with the highest valuation. A preferred area of application of the method according to the invention is encoding of digitized images in the form of medical photographs, in particular medical X-ray photographs, for example computer tomography photographs.

IPC 8 full level
G06T 9/00 (2006.01); **H04N 7/26** (2006.01)

CPC (source: EP KR US)
H03M 7/3002 (2013.01 - KR); **H04N 19/573** (2014.11 - EP KR US)

Citation (search report)
See references of WO 2010020592A1

Citation (examination)
I. J. MADDOX: "The variances of a sequence", MATHEMATICAL PROCEEDINGS OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY, 31 July 1978 (1978-07-31), XP055213503, Retrieved from the Internet <URL:http://dx.doi.org/10.1017/S0305004100054931> [retrieved on 20150915]

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

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
WO 2010020592 A1 20100225; CN 102124495 A 20110713; CN 102124495 B 20140924; DE 102008058489 A1 20100415; EP 2313864 A1 20110427; JP 2012500546 A 20120105; JP 5284471 B2 20130911; KR 101618080 B1 20160504; KR 20110063768 A 20110614; US 2011170789 A1 20110714; US 8472739 B2 20130625

DOCDB simple family (application)
EP 2009060570 W 20090814; CN 200980132218 A 20090814; DE 102008058489 A 20081121; EP 09781871 A 20090814; JP 2011523399 A 20090814; KR 20117006482 A 20090814; US 73781409 A 20090814