Title (en)
METHOD AND DEVICE FOR CODING AND DECODING

Title (de)
VERFAHREN UND VORRICHTUNG ZUM CODIEREN UND DECODIEREN

Title (fr)
PROCEDE ET DISPOSITIF DE CODAGE ET DE DECODAGE

Publication
EP 1782634 A1 20070509 (DE)

Application
EP 05764634 A 20050729

Priority
- EP 2005053709 W 20050729
- DE 102004041664 A 20040827

Abstract (en)
[origin: WO2006024584A1] The invention relates to a method for video coding image sequences, wherein images of the image sequence are coded in a scaled manner such that the obtained video data contains information which represents the image in a plurality of different steps from a defined image resolution and/or image quality (e.g. according to the data rate), and the resolution is defined by the number of image pixels of each represented image. Coding takes place in a block-based manner such that, for a description of an approximate movement of parts of one of the images, contained in the image sequence, at least one block structure which describes the movement is produced, said structure being fitted in such a manner that it is divided from a block into partial blocks comprising, in parts, sub-blocks which divide in a fine manner the successive partial blocks. According to the invention, a first block structure is produced temporally for at least one first resolution level and a second block structure is produced for a second resolution level.The first resolution level has a lower image pixel number and/or image quality than the second resolution level. Also, the second block structure is compared to the first block structure such that differences in the block structure are determined, such that on the base of the properties of the structure differences, a modified second block structure is produced. The structure thereof represents one part of the second block structure. Subsequently, the modified block structure and the second block structure are compared based on at least one value which is proportional to the quality of the image and the block structure and the value thereof is directly proportional to an improved quality based on the coding of the bit sequence.

IPC 8 full level
H04N 7/26 (2006.01); **H04N 7/46** (2006.01); **H04N 7/50** (2006.01); **H04N 19/593** (2014.01)

CPC (source: EP KR US)
H04N 19/119 (2014.11 - EP US); **H04N 19/147** (2014.11 - EP US); **H04N 19/172** (2014.11 - EP US); **H04N 19/176** (2014.11 - EP KR US); **H04N 19/187** (2014.11 - EP US); **H04N 19/33** (2014.11 - EP US); **H04N 19/36** (2014.11 - EP US); **H04N 19/51** (2014.11 - KR); **H04N 19/517** (2014.11 - EP US); **H04N 19/59** (2014.11 - EP US); **H04N 19/61** (2014.11 - EP US); **H04N 19/70** (2014.11 - EP US); **H04N 19/96** (2014.11 - EP US)

Citation (search report)
See references of WO 2006024584A1

Citation (examination)
- BENOIT TIMMERMAN ET AL: "Response to SVC CE5 - Optimization of tradeoff between motion information and texture", 70. MPEG MEETING; 18-10-2004 - 22-10-2004; PALMA DE MALLORCA; (MOTION PICTURE EXPERT GROUP OR ISO/IEC JTC1/SC29/WG11),, no. M11365, 13 October 2004 (2004-10-13), XP030040139, ISSN: 0000-0252
- XU JIZHENG ET AL: "3D Sub-band Video Coding using Barbell lifting, ISO/IEC JTC1/SC29/WG11 MPEG2004/M10569/S05", ISO/IEC JTC1/CS29/WG11 MPEG2004/M10569/S05, XX, XX, 1 March 2004 (2004-03-01), pages 1 - 14, XP002356360

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102004041664 A1 20060309; CN 101010961 A 20070801; CN 101010961 B 20101201; EP 1782634 A1 20070509; JP 2008511226 A 20080410; JP 2011172297 A 20110901; JP 5300921 B2 20130925; KR 101240441 B1 20130308; KR 20070046880 A 20070503; US 2008095241 A1 20080424; US 8290058 B2 20121016; WO 2006024584 A1 20060309

DOCDB simple family (application)
DE 102004041664 A 20040827; CN 200580029004 A 20050729; EP 05764634 A 20050729; EP 2005053709 W 20050729; JP 2007528814 A 20050729; JP 2011130250 A 20110610; KR 20077004134 A 20050729; US 66126505 A 20050729