

Title (en)
GLOBAL AND DENSE MOVEMENT ESTIMATION

Title (de)
SCHÄTZUNG DER ALLGEMEINEN UND DER DICHTEBEWEGUNG

Title (fr)
ESTIMATION DE MOUVEMENT GLOBAL ET DENSE

Publication
EP 2522140 A1 20121114 (FR)

Application
EP 11704249 A 20110104

Priority
• FR 1050014 A 20100104
• FR 2011050010 W 20110104

Abstract (en)
[origin: WO2011080495A1] The invention relates to a method which uses a series of images sensed by an image sensor including at least one preceding image and one following image to estimate movement. A first estimated movement is initially obtained (101) by estimating the total movement from the preceding image to the following image. Next, an image compensated according to the first estimated movement is obtained (102) from either one of the preceding and following images. Then, a second estimated movement (U, V, N) is obtained (103) by estimating dense movement between the compensated image and the other from the preceding and following images. Next, a residual value of global movement (r) is determined (104). Finally, if (105) the residual value is lower than a threshold value (S) the second estimated movement (U, V, N) is provided; otherwise, the preceding steps are repeated. The first estimated movement is determined by applying a binary image mask, and if during step /e/ the steps /a/ to /e/ are repeated, said steps are performed by applying a binary image mask updated according to the second estimated movement.

IPC 8 full level
H04N 7/26 (2006.01); **H04N 5/232** (2006.01); **H04N 19/593** (2014.01)

CPC (source: EP US)
G06T 7/20 (2013.01 - US); **H04N 5/144** (2013.01 - EP US); **H04N 19/527** (2014.11 - EP US); **H04N 23/6811** (2023.01 - EP US)

Citation (search report)
See references of WO 2011080495A1

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 2011080495 A1 20110707; BR 112012016403 A2 20180731; EP 2522140 A1 20121114; FR 2955007 A1 20110708;
FR 2955007 B1 20120217; RU 2012133468 A 20140320; RU 2565515 C2 20151020; US 2013142397 A1 20130606; US 8873809 B2 20141028

DOCDB simple family (application)
FR 2011050010 W 20110104; BR 112012016403 A 20110104; EP 11704249 A 20110104; FR 1050014 A 20100104;
RU 2012133468 A 20110104; US 201113519944 A 20110104