Title (en)

CONTEXT BASED VIDEO ENCODING AND DECODING

Title (de)

KONTEXTBASIERTE VIDEOCODIERUNG UND -DECODIERUNG

Title (fr)

ENCODAGE ET DÉCODAGE VIDÉO BASÉS SUR LE CONTEXTE

Publication

EP 2815572 A2 20141224 (EN)

Application

EP 13710636 A 20130207

Priority

- US 201261615795 P 20120326
- US 201261707650 P 20120928
- US 201213725940 A 20121221
- US 2013025123 W 20130207

Abstract (en)

[origin: WO2013148002A2] A model-based compression codec applies higher-level modeling to produce better predictions than can be found through conventional block-based motion estimation and compensation. Computer- vision-based feature and object detection algorithms identify regions of interest throughout the video datacube. The detected features and objects are modeled with a compact set of parameters, and similar feature/object instances are associated across frames. Associated features/objects are formed into tracks and related to specific blocks of video data to be encoded. The tracking information is used to produce model-based predictions for those blocks of data, enabling more efficient navigation of the prediction search space than is typically achievable through conventional motion estimation methods. A hybrid framework enables modeling of data at multiple fidelities and selects the appropriate level of modeling for each portion of video data.

IPC 1-7

H04N 7/26; H04N 7/36

CPC (source: EP)

H04N 19/23 (2014.11); **H04N 19/51** (2014.11); **H04N 19/85** (2014.11)

Citation (search report)

See references of WO 2013148002A2

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 2013148002 A2 20131003; **WO 2013148002 A3 20131219**; CA 2868448 A1 20131003; EP 2815572 A2 20141224; JP 2015515806 A 20150528; TW 201342926 A 20131016

DOCDB simple family (application)

US 2013025123 W 20130207; CA 2868448 A 20130207; EP 13710636 A 20130207; JP 2015503204 A 20130207; TW 102107461 A 20130304