Title (en)
VIDEO COMPRESSION REPOSITORY AND MODEL REUSE

Title (de)
VIDEOKOMPRESSIONSSPEICHER UND MODELLWIEDERVERWENDUNG

Title (fr)
RÉFÉRENTIEL DE COMPRESSION VIDÉO ET MODÈLE DE RÉUTILISATION

Publication
EP 2815573 A1 20141224 (EN)

Application
EP 13710946 A 20130306

Priority
- US 201261616334 P 20120327
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- US 2013029297 W 20130306

Abstract (en)
[origin: WO2013148091A1] Systems and methods of improving video encoding/decoding efficiency may be provided. A feature-based processing stream is applied to video data having a series of video frames. 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 each track is given a representative, characteristic feature. Similar characteristic features are clustered and then stored in a model library, for reuse in the compression of other videos. A model-based compression framework makes use of the preserved model data by detecting features in a new video to be encoded, relating those features to specific blocks of data, and accessing similar model information from the model library. The formation of model libraries can be specialized to include personal, "smart" model libraries, differential libraries, and predictive libraries. Predictive model libraries can be modified to handle a variety of demand scenarios.

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H04N 7/26

CPC (source: EP)
H04N 19/176 (2014.11); **H04N 19/97** (2014.11)

Citation (search report)
See references of WO 2013148091A1

Cited by
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