Title (en)

METHOD AND APPARATUS FOR EFFICIENT VIDEO PROCESSING

Title (de)

VERFAHREN UND VORRICHTUNG ZUR EFFIZIENTEN VIDEOBEARBEITUNG

Title (fr)

PROCEDE ET APPAREIL PERMETTANT UN TRAITEMENT VIDEO EFFICACE

Publication

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Application

EP 00926096 A 20000417

Priority

- US 0010439 W 20000417
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Abstract (en)

[origin: WO0064148A1] A video compression method and apparatus is disclosed. The present invention includes a "smart" or active decoder (Fig. 3) that performs much of the transmission and the instruction burden that would otherwise be required of the encoder, thus greatly reducing the overhead and resulting in a much smaller encoded bitstream. Thus, the corresponding (i.e., compatible) encoder of the present invention can produce an encoded bitstream with a greatly reduced overhead. This is achieved by encoding a reference frame (Fig. 3, element 7) based on the structural information inherent to the image (e.g., image segmentation, geometry, color, and/or brightness), and then predicting other frames relative to the structural information. Typically, the description of a predicted frame would include kinetic information (Fig. 3, element 6) (e.g., segment motion data and/or inexact matches and appearance of new information, and portion of the segment evolution that is captured by motion per se etc.). Because the decoder is capable of independently determining the structural information (and relationships thereamong) underlying the predicted frame, such information need not be explicitly transmitted to the decoder. Rather, the encoder need only send information that the encoder knows the decoder cannot determine on its own.

IPC 1-7

H04N 7/12

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

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- See references of WO 0064167A1

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