DESCRIPTION

■ HEVC is the new standard international for the representation of digital video. In relation to the previous standard (H.264/AVC), HEVC allows a reduction in size by a factor of 2 for the same quality

■ This justifies the interest of transcoding: reducing the cost of storing and transmitting video

■ "Classic" transcoding method: Full decode-Full Encode (FD-FE)

■ Proposed method: the analysis of motion information allows the encoder to be oriented towards efficient coding choices, without having to test all possible configurations. In the majority of cases, the our fast choice coincides with the exhaustive optimal choice

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COMPETITIVE ADVANTAGES

■ Acceleration of transcoding (between 2x and 10x, average 3x) with less increase in throughput (1.4%)

APPLICATIONS

■ Transcodage HEVC can be integrated in a large spectrum of systems :

• <u>Digital video providers</u>: transcoding to a more advanced technology reduces the storage capacity requirements for a library video, and in the long term, is necessary due to the obsolescence of standards. In this case, given the potentially very large amount of data to transcode, a fast technique can reduce costs without impacting quality

• <u>Video in the cloud:</u> transcoding at the head of the network reduces bitrates required to import videos into the cloud. In this case, a fast technique can allow a real-time service

• <u>Private individual:</u> convert your videos into a more compact and modern format. A fast technique can be used to perform transcoding

DEVELOPMENT STAGE

■ TRL 3 – Proof-of-Concept Demonstrated :

• Numerical performance testing completed
• Benchmarking analysis completed

■ Validation in simulated environment in progress

INTELLECTUAL PROPERTY

■ Patent Application (September 2014) n° FR3026592:
Granted in France,
Pending in Canada, USA, Europe