



Method and Apparatus for High Quality Video Reconstruction

Tech ID: 22520 / UC Case 2012-655-0

BRIEF DESCRIPTION

A novel method and apparatus to improve the overall quality of a reconstructed video signal at a given transmission rate, or to maintain the current signal quality at reduced transmission rates.

BACKGROUND

Spatially scalable video coders are central to video communications over networks and with a diverse set of devices. These encoders are particularly important when streaming video over networks to devices with a wide variety of display resolutions. It is difficult to preserve high quality video signals to so many different types of devices while varying the video transmission bit rates to accommodate high network traffic. High network traffic will cause a decrease in signal transmission rates, reducing the overall quality of the video signal.

DESCRIPTION

Researchers at the University of California, Santa Barbara have developed a novel method and apparatus to improve the overall quality of a reconstructed video signal at a given transmission rate, or to maintain the current signal quality at reduced transmission rates. The method also employs a prediction scheme to improve video quality by predicting information about future signal data from information given in the currently streaming data. These characteristics help to vastly improve device video streaming performance and video signal quality for devices with varying display resolutions.

ADVANTAGES

- ▶ Vast signal quality improvements at a given transmission rate
- ▶ Maintained signal quality at reduced bit transmission rates

APPLICATIONS

- ▶ Video streaming applications for devices with varying display resolutions
- ▶ Multimedia player device manufacturers
- ▶ Smart phones & tables
- ▶ Networking industry

CONTACT

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OTHER INFORMATION

KEYWORDS

reconstruction, SVC,

streaming, video, indmedia,

indtelecom

CATEGORIZED AS

- ▶ **Communications**
- ▶ Internet
- ▶ Other
- ▶ Wireless

RELATED CASES

2012-655-0

This technology is available for licensing.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,307,256	04/05/2016	2012-655

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ [Devices for Polyphonic Audio Signal Prediction & Frame Loss Concealment](#)

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