Title (en)

SIGNAL PROCESSING APPARATUS AND METHOD

Title (de)

VORRICHTUNG UND VERFAHREN ZUR SIGNALVERARBEITUNG

Title (fr)

DISPOSITIF ET PROCEDE DE TRAITEMENT DU SIGNAL

Publication

EP 1057345 A1 20001206 (EN)

Application

EP 99973212 A 19991116

Priority

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- EP 9908937 W 19991116
- EP 98402982 A 19981127

Abstract (en)

[origin: WO0033582A1] A signal-processing arrangement comprising an examining circuit (EXAM), and adjustable filter (FIL), and a signal processor (PRC). The signal processor (PRC) may be, for example, a video encoder for encoding a sequence of pictures in accordance with an MPEG standard. The examining circuit (EXAM) examines a signal (S) to be processed so as to obtain a distortion indication (IND) the distortion indication (IND) indicates to which extent distortion (DIST) would be introduced if the signal (S) were processed (PRC[S]) by means of the processor (PRC). An adjustable filter (FIL) filters the signal (S) in dependence on the distrotion indication (IND) so as to obtain a filtered signal (SF). The signal processor (PRC) processes the filtered signal (SF). Thus, the signal-processing arrangement filters the signal to be processed in a pro-active manner so as to counter distortion which might otherwise be introduced by processing the signal. Accordingly, a satisfactory signal quality can be obtained. For example, in a video-encoding application, the filter can reduce details contained in a series of pictures. This allows the series of pictures to be coded with a sufficient precision without introducing block effects which might otherwise occur if the pictures were not filtered. Moreover, since the filter is pro-actively adjusted, it filters the series of pictures more evenly than if the filter were retro-actively adjusted. Accordingly, there will be relatively little variation in resolution from one picture to another, which contributes to a satisfactory overall picture quality.

IPC 1-7

H04N 7/50

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See references of WO 0033582A1

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