Abstract

Method of making a hierarchical estimate of the movement in a television signal

The starting point is a method of making a hierarchical estimate of the movement in a television signal, in which the video image is divided into blocks of fixed size and the movement relative to a second video image is determined for each block. Such an estimate of the movement serves, in particular, for transmitting a picture difference for the purposes of saving bandwidth, transmission time or storage capacity.

The object is to reduce the amount of circuitry required for the estimation of the movement.

In accordance with the invention, mutually non-overlapping ranges are produced at the lower, more finely resolved hierarchical level and the critical points of these ranges are used as the points for an analysis at a level that is located higher in the hierarchy. Preferably, points, which lie between the lines and which do not represent real picture elements in the line raster, are investigated in the mutually non-overlapping ranges.

In particular, for making an estimate of the movement in a television signal for a transmission or recording using data reduction.

Fig. 2