

ABSTRACT

REFERENCE FIGURE 4

A layered coder includes a lower resolution predictive encoder (102) and a higher resolution encoder (402) providing coded low and high resolution signals at lines (110) and (218) respectively. The prediction error of the lower resolution predictive encoder (102) is provided as a prediction error estimate to the higher resolution encoder (402), the prediction error estimate being subtracted from the prediction error generated in the higher resolution predictive encoder (402) by the subtractor (210). This difference from the subtractor (404) is coded by the coder (212) whose output is made available on the line (218). The prediction error estimate from the up sampler 130 is added to the output from the decoder 220 by an adder 406 in order to complete the predictive loop of the higher resolution predictive encoder 402. The prediction error estimate can also be subtracted from the prediction error of the higher resolution predictive encoder in the transform domain. The layered coder makes available both higher and lower resolution coded signals, with good coding efficiency as the coding information obtained from the lower resolution encoder 102 is used in the coding carried out by the higher resolution predictive encoder 402.