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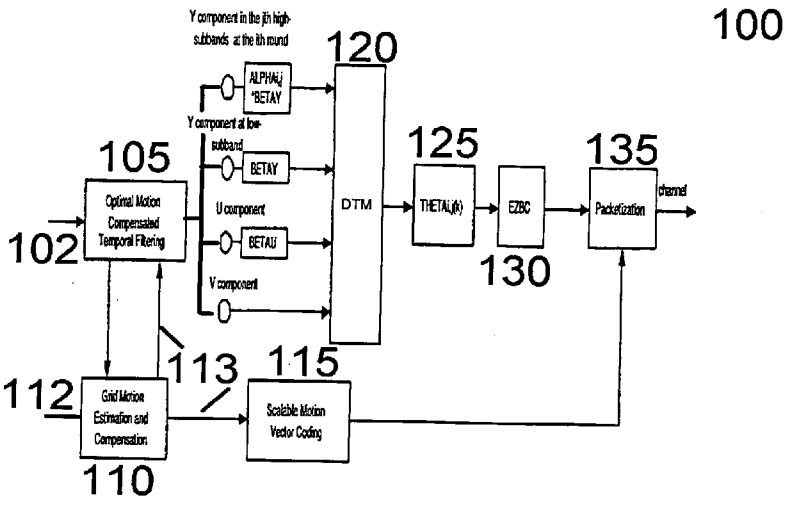
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(54) Title: SCALABLE VIDEO CODING WITH GRID MOTION ESTIMATION AND COMPENSATION



(57) Abstract: A scalable coder having a grid motion estimation and compensation module (110), a motion compensation temporal filtering module (105), a scalable coding module (115), a discrete transformation module (120), and a packetization module (135). The grid-motion estimation and compensation module (110) outputs a scalable motion vector from the source video data, supplied resolution and bit rate parameters. The motion compensation temporal filtering module (105) generates, from the source video data and the scalable motion vector, a residual image corresponding to the difference between the present and previous image frames. The scalable coding module (115) is coupled to receive and encode the scalable motion vector. The discrete transformation module (120) is configured to receive and domain transform the supplied video to a sequence of coefficients. The packetization module is coupled to the scalable coding module (115) and the discrete transformation module (120), and is operable to combine the encoded scalable motion vector and the sequence of coefficients into a packet.

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