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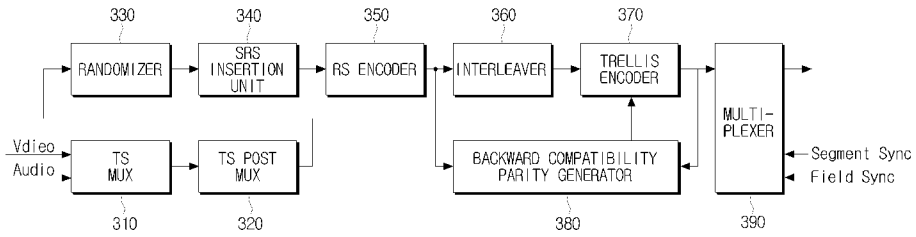
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(54) Title: METHOD FOR FORMATTING DIGITAL BROADCAST TRANSPORT STREAM PACKET FOR IMPROVED RECEIVING PERFORMANCE, DIGITAL BROADCAST TRANSMITTER, AND SIGNAL PROCESSING METHOD THEREOF



(57) Abstract: A method of formatting a digital broadcast transport stream packet, a digital broadcast transmitter, and a signal processing method thereof, includes constructing a transport stream packet that includes a stuffing region for an insertion of a known supplementary reference s equence (SRS) data therein, randomizing the packet that includes the stuffing region is randomized, and the SRS data is inserted into the stuffing region of the randomized packet. Adding a parity for an error correction to the packet into which the SRS data has been inserted, the packet to which the parity has been added is interleaved, and a trellis encoding of the interleaved packet is performed. Inserting a segment sync signal and a field sync signal into the trellis-encoded packet, and a vestigial side band (VSB) modulation and an RF conversion of the packet are performed to transmit the VSB-modulated and RF-converted packet.

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