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(54) **Title:** METHOD AND APPARATUS FOR VIDEO TRANSMISSION OVER LONG DISTANCES USING TWISTED PAIR CABLES

(57) **Abstract:** A system capable of transmitting and receiving high frequency video signals across various lengths of a twisted pair cable while maintaining video quality is presented. The system includes a transmitter and a receiver tandem coupled together over twisted pair cable. Each video component is mixed with a reference signal in the transmitter and driven differentially onto the twisted pair cable. Upon detection of a signal in the twisted pair cable, the receiver adjusts its internal gains until the known characteristic of the reference signal is achieved. The receiver then automatically adjusts the skew & DC offset. Thus, the receiver is able to automatically measure the degradation in video quality and appropriately compensate the video signals for the accumulated degradation caused primarily by the transmission between the transmitter and the receiver. The compensated video may subsequently be provided to a video display device.