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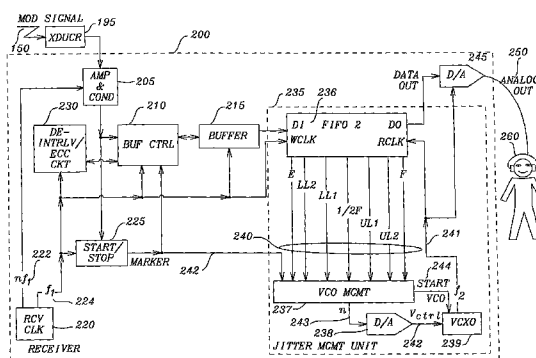
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(54) Title: A METHOD AND APPARATUS FOR ENSURING HIGH QUALITY AUDIO PLAYBACK IN A WIRELESS OR WIRED DIGITAL AUDIO COMMUNICATION SYSTEM



(57) Abstract: A communication system synchronizes data received and recovered from a transmission medium to the data transmitted such that there is neither under-run nor overrun of the data due to differences in the transmission and reception timing. The data communication system has a transmitter (100) and a receiver (200). The transmitter (100) encodes digital data into series of symbols and transmits a modulated signal composed of the series of symbols. The receiver (200) acquires the modulated signal, restoring the modulated signal, reconstructing the symbols of the digital data from the modulated signal and synchronizing the digital data to a first reference signal. The digital data is transferred to a buffer data retention circuit. The digital data is transferred from the buffer retention circuit to a jitter management unit (235). A boundary marker signal detection circuit extracts a marker signal indicating a boundary of symbols of the digital data to provide an indication of the timing of the digital data as broadcasted by the transmitter (100). A jitter management unit (235) synchronizes the digital data to the first reference signal. The jitter management unit (235) has a FIFO buffer (236) to receive the reconstructed digital data at the rate of the first reference signal from the buffer retention circuit and transmits the synchronized digital data at a rate approximating the timing of the transmitter (100). The jitter management unit (235) synchronizes the digital data by monitoring the level of the digital data present within the FIFO buffer (236) and adjusting the consumption of the digital data from the FIFO buffer (236).



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