



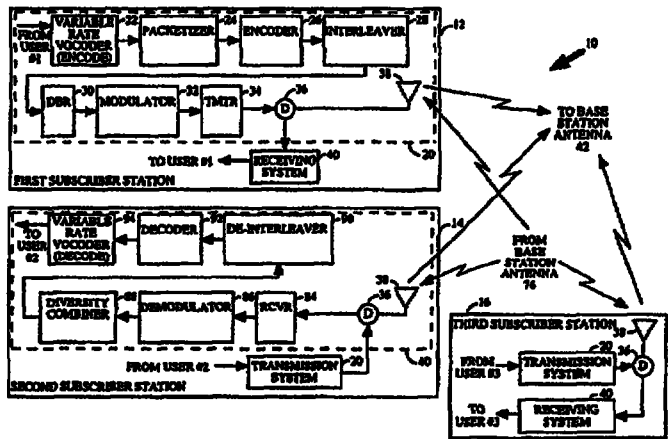
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(54) Title: CONFERENCE CALLING SYSTEM AND METHOD FOR A WIRELESS COMMUNICATIONS CHANNEL



(57) Abstract

A conference calling system for a wireless communications channel. The system is adapted for use with a channel having first, second and third participants communicating via first (34), second (20) and third (20) transmitters and receivers respectively. The system includes a circuit for receiving an encoded signal (144) from at least one of the transmitters. A second circuit determines (62) which of the participants is speaking from the received encoded signal. A third circuit is provided for re-transmitting (66) an encoded signal received from the speaking participant to the other participants. In the illustrated implementation, the encoded signals are variable rate speech vocoded signals in which speech is vocoded at full rate, silence is vocoded at 1/8th rate and the 1/2 and 1/4 rates are used as transitional rates. In the illustrative implementation, the speaker's signal is identified by examining the rate of the receiving vocoded signals. When the speaker's vocoded signal is identified, it is re-transmitted without de-vocoding to the non-speaking participants in the conference call. By re-transmitting the speaker's signal without de-vocoding, the quality of the received signal is preserved.