METHOD FOR USER VOICE ACTIVITY DETECTION IN A COMMUNICATION ASSEMBLY, COMMUNICATION ASSEMBLY THEREOF

ABSTRACT OF THE INVENTION

Many headsets include automatic noise cancellation (ANC) which dramatically reduces perceived background noise and improves user listening experience. Unfortunately, the voice microphones in these devices often capture ambient noise that the headsets output during phone calls or other communication sessions to other users. In response, many headsets and communication devices provide manual muting circuitry, but users frequently forget to turn the muting on and/or off, creating further problems as they communicate. To address this, the present inventors devised, among other things, an exemplary headset that detects the absence or presence of user speech, automatically muting and unmuting the voice microphone without user intervention. Some embodiments leverage relationships between feedback and feedforward signals in ANC circuitry to detect user speech, avoiding the addition of extra hardware to the headset. Other embodiments also leverage the speech detection function to activate and deactivate keyword detectors.

Fig. 2