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VOICE ACTUATED SWITCHING SYSTEM**Abstract**

A voice-actuated switching system connects one or more microphones to an audio line in accordance with the output signal levels from each of the

5 microphones. To reduce the effects of degradation of speech signals due to reverberation and noise pickup, the switching system uses directional microphones housed in a circular enclosure and arranged in a conference array configuration with response patterns aimed outwardly from the center of the enclosure. The switching system also uses a voting algorithm to select for activation the appropriate

10 microphones indicative of the position of one or more people speaking and a variable weighting factor for gradually turning on or off the signal from each activated microphone that is coupled to the audio line. Typically one microphone will be selected to monitor a person speaking. Since its response pattern is normally pointed in the direction of the person speaking, it is less sensitive to speaker echo due to

15 reverberation. If two people are simultaneously speaking on opposite sides of the array of directional microphones, however, two generally opposed microphones are selected, and the amount of reverberation increases only slightly over the amount of reverberation that would be present if just a single microphone were employed.

This Sheet Has Been Replaced

