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(54) Title: **A METHOD FOR ENHANCING 3-D LOCALIZATION OF SPEECH**

(57) Abstract

A computer-readable medium stores sequences of instructions to be executed by a processor. These instructions cause the processor to perform the following steps to enhance 3-D localization of a speech source. A digital speech signal is received (200). The maximum frequency of the digital speech signal is determined (202). The sampling rate of the digital speech signal is increased (208). Next, wide band-Gaussian noise is added (210) to the digital speech signal to create a wide-band digital speech signal with higher frequencies. Finally, the wide-band digital speech signal can be localized via a finite impulse response filter.

