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# United States Patent [19]

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Cowan

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[54] **AUDIO PROCESSING SYSTEM USING DELAYED AUDIO**

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[21] Appl. No.: **758,578**

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[51] Int. Cl.<sup>5</sup> ..... **H03G 7/00**

[52] U.S. Cl. .... **381/106; 381/110; 333/14; 341/132; 328/173**

[58] Field of Search ..... **381/110, 106; 333/14; 341/132; 328/173**

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*Primary Examiner*—Jin F. Ng  
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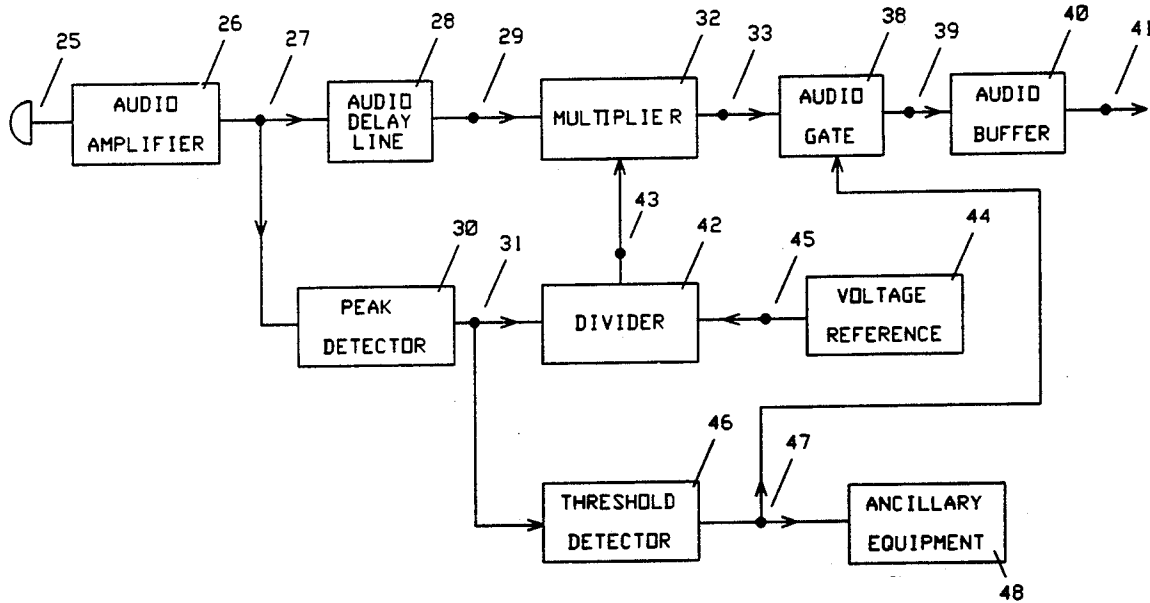
### [57] ABSTRACT

An audio processing method is described wherein an audio input signal is delayed and then submitted for signal processing. The signal is sampled prior to the delay and control parameters for speech compression, voice gating, and voice activation of ancillary equipment generated. The delayed audio is then processed according to the parameters determined prior to the delay to eliminate poor transient response and signal clipping.

**6 Claims, 4 Drawing Sheets**

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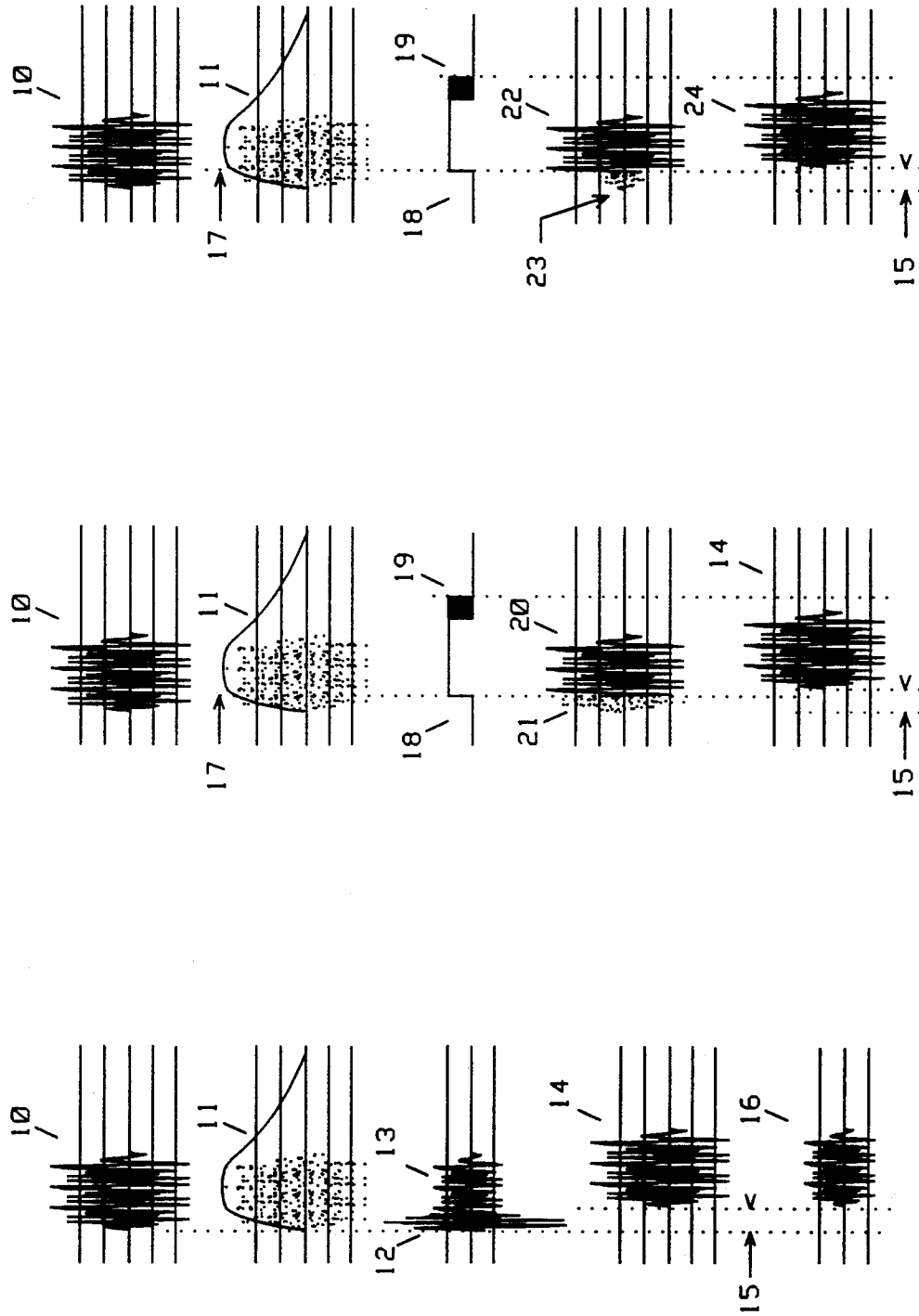


Fig. 1

Fig. 2

Fig. 3

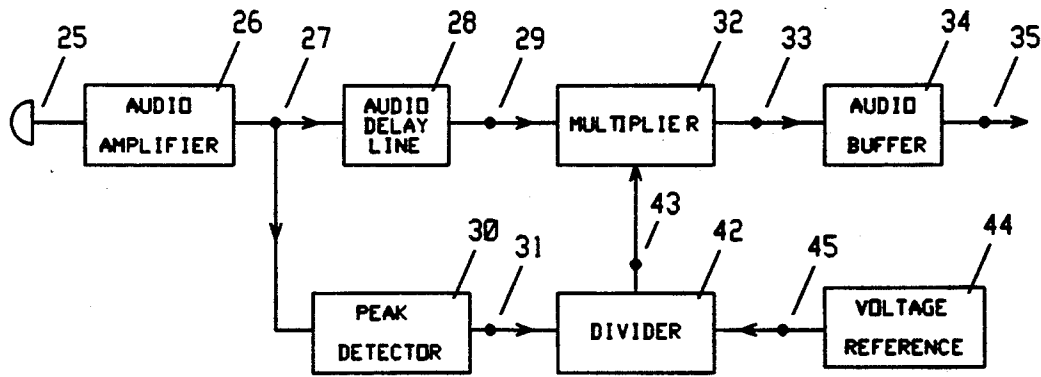


Fig. 4

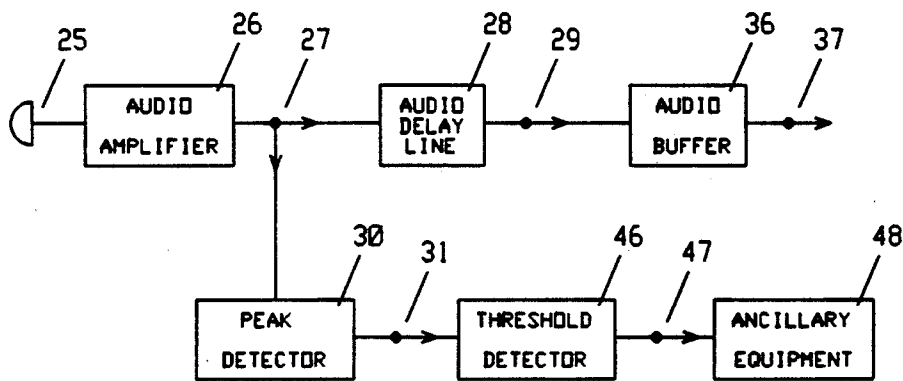


Fig. 5

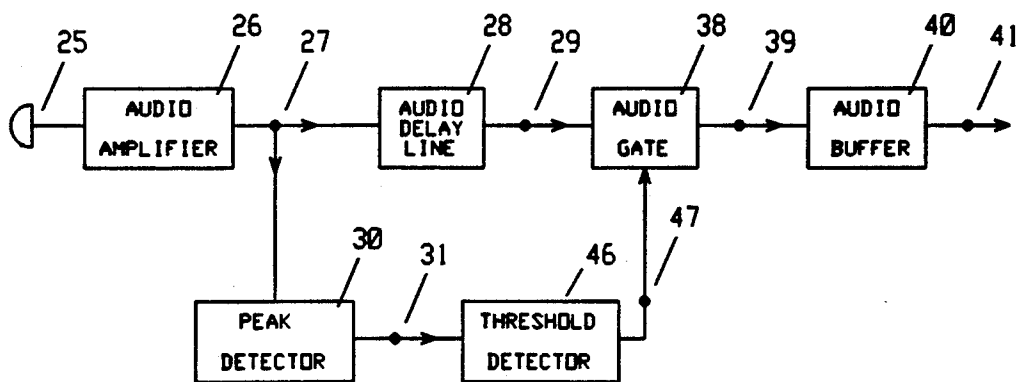


Fig. 6

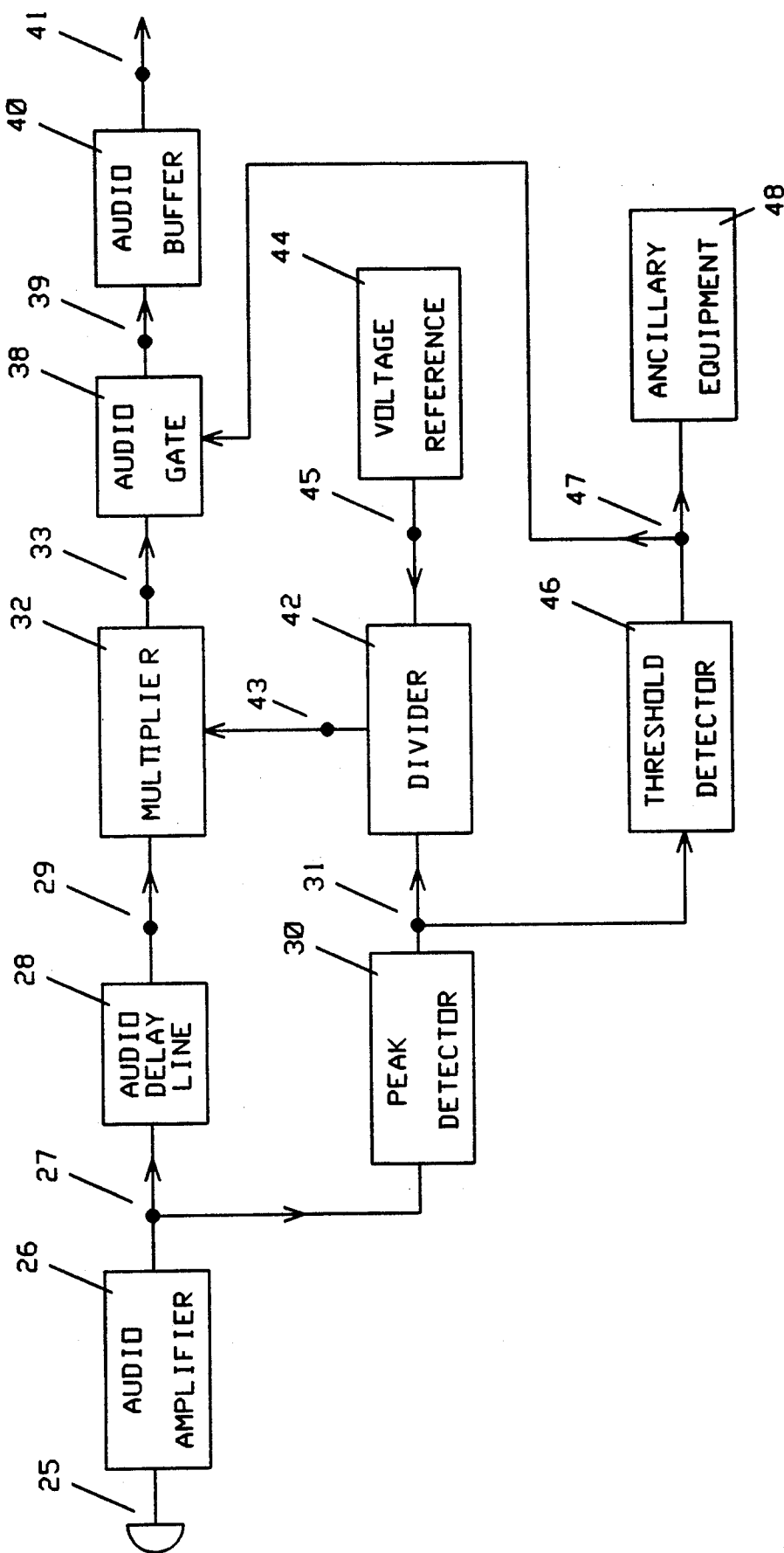


Fig. 7

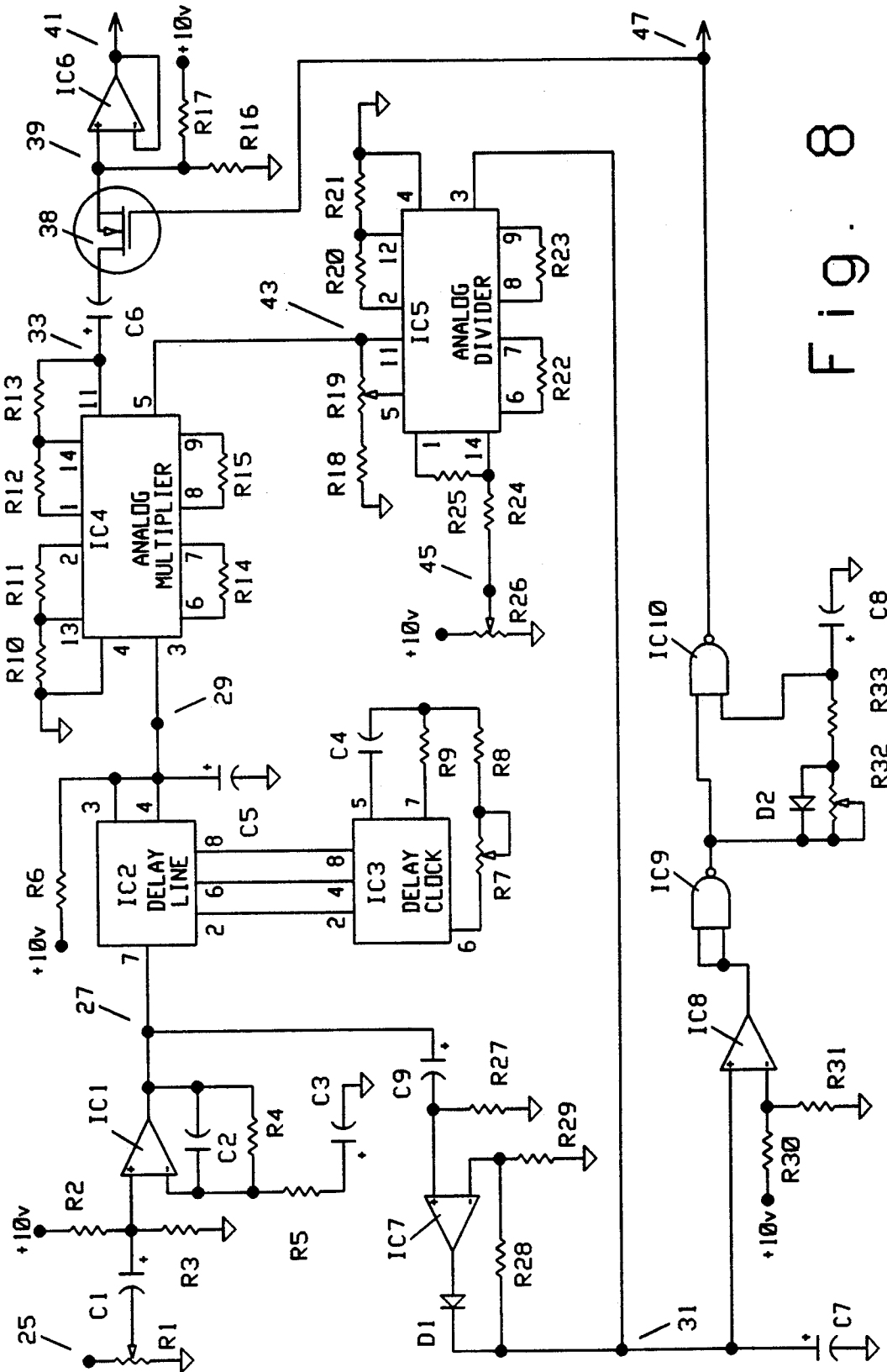


FIG. 8

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