

**DIGITAL AUDIO SIGNAL PROCESSING METHOD AND SYSTEM FOR
GENERATING AND CONTROLLING DIGITAL REVERBERATIONS FOR
AUDIO SIGNALS**

ABSTRACT

The present invention provides a digital audio signal processing system that comprises a set of delay lines, allpass and lowpass filters to achieve the reverberation effect. The present invention further provides a method for generating and controlling digital reverberations for audio signals. The reverberation generated will have an increasing echo density in the time domain and a faster decay of high frequency signals than low frequency signals. The controlling mechanism of reverberation generation is realized through the extraction of the real environment characteristics.

FIG 5