

ABSTRACT

CONFIGURABLE RECURSIVE DIGITAL FILTER FOR
PROCESSING TELEVISION AUDIO SIGNALS

A television audio signal encoder includes a device that sums a left channel audio signal and a right channel audio signal to produce a sum signal. The device also subtracts one of the left and right audio signals from the other to produce a difference signal. The encoder also includes a configurable infinite impulse response digital filter that selectively uses one or more sets of filter coefficients to filter the difference signal. The set of filter coefficients is applied to the difference signal by a single multiplier in a recursive manner to prepare the difference signal for transmission.

Fig. 1