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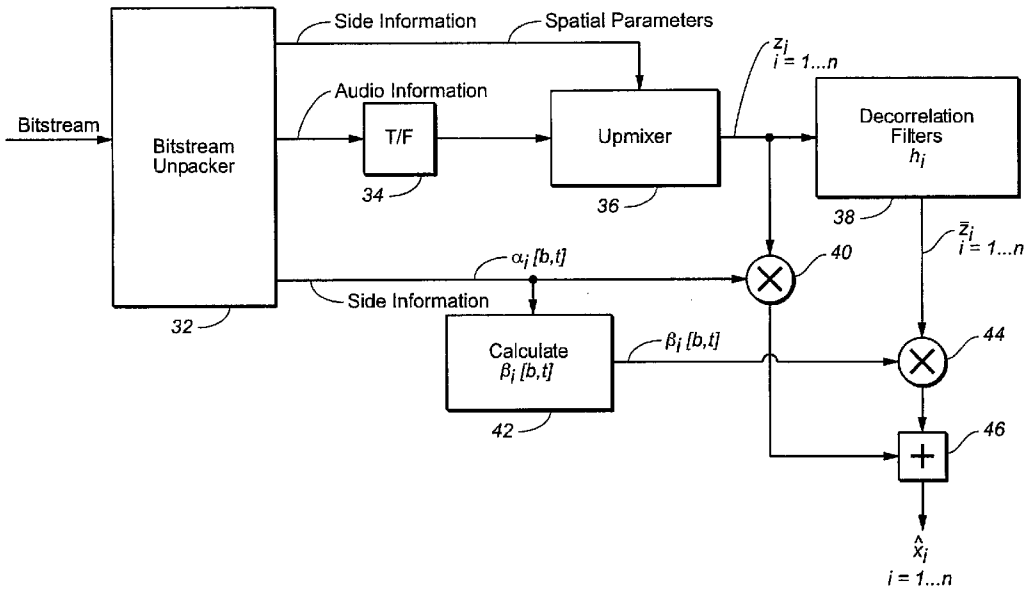
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(54) Title: MULTICHANNEL DECORRELATION IN SPATIAL AUDIO CODING



(57) Abstract: Each of N audio signals are filtered with a unique decorrelating filter (38) characteristic, the characteristic being a causal linear time-invariant characteristic in the time domain or the equivalent thereof in the frequency domain, and, for each decorrelating filter characteristic, combining (40, 44, 46), in a time and frequency varying manner, its input (Zi) and output (Z-i) signals to provide a set of N processed signals (X i). The set of decorrelation filter characteristics are designed so that all of the input and output signals are approximately mutually decorrelated. The set of N audio signals may be synthesized from M audio signals by upmixing (36), where M is one or more and N is greater than M.

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