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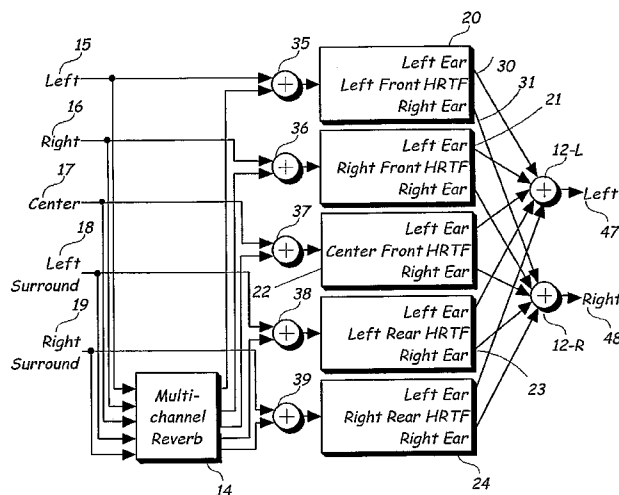
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(54) Title: AUDIO SIGNAL PROCESSING SYSTEM AND METHOD



(57) **Abstract:** A method, an apparatus, and a software product to process a plurality of input audio signals (15-19). The apparatus accepts a plurality of input signals (15-19) and includes a multi-input, multi-output reverberator (14) arranged to, generate a set of output signals (35-39) including delayed reverberation components simulating the reverberations a listener is likely to hear in a listening environment. The apparatus further includes a multi-input, two-output filter (20-24) accepting the outputs of the reverberator and the plurality of input terminals, providing outputs for the left and right ears, and configured to implement a set of head related transfer functions corresponding to a listening environment and a set of directions of a listener in the listening environment. The apparatus is such that a listener listening to the outputs through headphones (47-48) has the sensation of listening to the plurality of input audio signals as if they are emanating from a plurality of loudspeakers spatially located in the listening environment at a corresponding plurality of directions.

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