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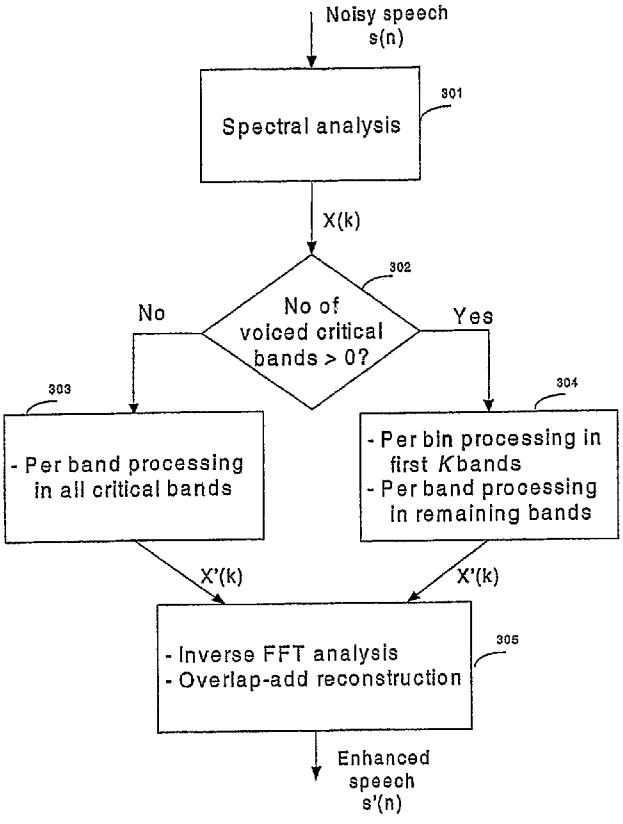
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(54) Title: METHOD AND DEVICE FOR SPEECH ENHANCEMENT IN THE PRESENCE OF BACKGROUND NOISE



Overview of the disclosed noise reduction algorithm.

(57) Abstract: In one aspect thereof the invention provides a method for noise suppression of a speech signal that includes, for a speech signal having a frequency domain representation dividable into a plurality of frequency bins, determining a value of a scaling gain for at least some of said frequency bins and calculating smoothed scaling gain values. Calculating smoothed scaling gain values includes, for the at least some of the frequency bins, combining a currently determined value of the scaling gain and a previously determined value of the smoothed scaling gain. In another aspect a method partitions the plurality of frequency bins into a first set of contiguous frequency bins and a second set of contiguous frequency bins having a boundary frequency there between, where the boundary frequency differentiates between noise suppression techniques, and changes a value of the boundary frequency as a function of the spectral content of the speech signal.

WO 2005/064595 A1

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