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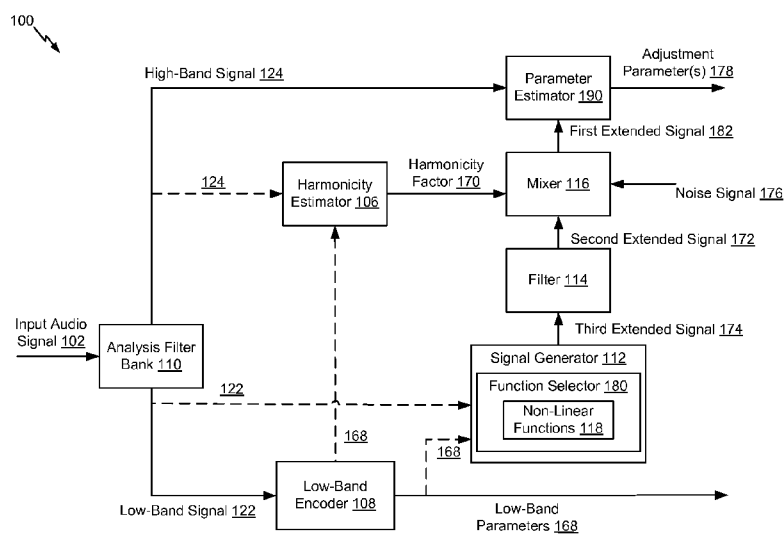
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[Continued on next page]

(54) Title: HARMONIC BANDWIDTH EXTENSION OF AUDIO SIGNALS

**FIG. 1**

(57) **Abstract:** A method includes separating, at a device, an input audio signal into at least a low-band signal and a high-band signal. The low-band signal corresponds to a low-band frequency range and the high-band signal corresponds to a high-band frequency range. The method also includes selecting a non-linear processing function of a plurality of non-linear processing functions. The method further includes generating a first extended signal based on the low-band signal and the non-linear processing function. The method also includes generating at least one adjustment parameter based on the first extended signal, the high-band signal, or both.

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