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Wang(10) **Pub. No.: US 2022/0360243 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **POWER AMPLIFIER WITH HARMONIC
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ABSTRACT

The present invention discloses an amplifier. The bias amplifier includes a signal input end, for inputting an input signal; a voltage input end, for inputting a source voltage; an amplifying circuit, for generating an amplified input signal according to the input signal, and the amplified input signal comprises a fundamental signal, a first harmonic signal and a second harmonic signal, wherein the first harmonic signal is a second order harmonic of the fundamental signal, and the second harmonic signal is a third order harmonic of the fundamental signal; a harmonic filter, coupled between the voltage input end and the amplifying circuit, for filtering the first harmonic signal and the second harmonic signal; and a signal output end, coupled to the harmonic filter, for outputting an output signal according to the amplified input signal.

