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(54) **FEEDFORWARD AMPLIFIER CIRCUIT,  
AUDIO AMPLIFIER AND AUDIO PLAYING  
DEVICE**

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#### **ABSTRACT**

Provided are feedforward amplifier circuit, audio amplifier and audio playing device, including: a main amplifier circuit, an adder circuit, a sub-amplifier circuit and a subtractor circuit, wherein the main amplifier circuit adds distortion to a first input signal to output a distorted signal, and inputs the distorted signal to the adder circuit and the subtractor circuit for performing feedforward correction; the sub-amplifier circuit amplifies a second input signal and serves as a positive input of the subtractor, so that a signal gain output by the subtractor is equal to a signal gain of the main amplifier; the subtractor circuit, with the distorted signal as a negative input, reversely amplifies the distorted signal and afterwards performs feedforward; and the adder circuit superimposes the distorted signal output by the main amplifier circuit and the reversely amplified distorted signal output by the subtractor, so as to output a distortion-free signal.

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