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(54) **BUFFER WITH GAIN SELECTION**

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(57) **ABSTRACT**

An electronic device has an amplifier having an amplifier input terminal and an amplifier output terminal, the amplifier output terminal being connected to the device output terminal. An input capacitor is connected between the device input terminal and the amplifier input terminal. A feedback capacitor is connected between the amplifier output terminal and the amplifier input terminal. A switchable capacitor has a first terminal connected to the amplifier input terminal and a second terminal connected to a respective first terminal of each of a first switch and a second switch. The first switch has its second terminal connected to the device input terminal. The second switch has its second terminal connected to the amplifier output terminal. In this arrangement, the switchable capacitor can be switched between forming part of the input path of the amplifier or the feedback path of the amplifier.

