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(54) **ADAPTIVE TEMPERATURE PEAKING CONTROL FOR WIDEBAND AMPLIFIERS**

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(57) **ABSTRACT**

Amplifiers with temperature-adaptive gain and peaking gain control are described. In one example, a temperature-adaptive amplifier includes an amplifier, a temperature sense circuit, and a peaking control level shifter to bias shift the output of the amplifier and adjust a peaking gain of the amplifier based on the temperature control signal. The peaking control level shifter can adjust a peaking gain of the amplifier based on the temperature control signal. The temperature-adaptive control can help to compensate for peaking gain in amplifiers based on the operating temperature of the amplifier. The control can help to compensate for unwanted changes in amplifier peaking gain, over time, resulting in more consistent peaking gain over the full operating frequency range of amplifiers.