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(54) **BIAS CIRCUIT AND POWER AMPLIFIER**

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(57) **ABSTRACT**

Bias circuits for CMOS power amplifiers are provided. The bias circuit includes a feedback module, a first bias module, and a second bias module. The feedback module has a first input connected to a output common mode voltage, a second input connected to a reference voltage, and an output connected to gates of main amplification transistors in a first differential amplification module; based on a difference between the output common mode voltage and the reference voltage, the feedback module adjusts gate voltages of main amplification transistors until the output common mode voltage is equal to the reference voltage; the first bias module provides bias voltages for the first differential amplification module; the second bias module provides bias voltages for a second differential amplification module. The present disclosure adopts direct negative feedback and cascoded current mirrors, which realize accurate DC gate bias and accurate control of the output common mode voltage.