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### (54) FAST START UP CONTROL CIRCUIT

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#### (57)ABSTRACT

Embodiments of the present disclosure provide a chopper amplifier circuit that includes an operational amplifier, and a notch filter to be operated by a chopping pulse. The notch filter has a first branch that has a first capacitor, and a second branch that has a second capacitor. A chopping delay switch is connected to the first branch and the second branch of the notch filter. A control circuit is to close the chopping delay switch to short-circuit the first branch and the second branch of the notch filter to each other. The control circuit is to detect establishment of feedback signal at the chopper amplifier. The control circuit is to open the chopping delay switch, responsive to detecting establishment of the feedback signal at the chopper amplifier.

