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(54) **SELF-BIASED AMPLIFIER CIRCUIT AND A METHOD FOR CONTROLLING A SELF-BIASED AMPLIFIER CIRCUIT**

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(57) **ABSTRACT**

A self-biased amplifier circuit, comprises: an input, wherein the input comprises input transistors forming inverters; bias transistors, wherein a source of each input transistor is connected to a drain of a bias transistor for providing a bias current to the inverters; an output connected to a first output node and/or a second output node; and pairs of transistor switches connected between the first or the second output node and a respective gate of the bias transistors, wherein the pairs of transistor switches are configured to control the self-biased amplifier circuit to assume an active mode or a standby mode.

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