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### (54) IMAGE SENSOR AMPLIFIERS WITH REDUCED INTER-CIRCULATION **CURRENTS**

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#### ABSTRACT

An image sensor may include an array of image sensor pixels. The array of image sensor pixels may be controlled by row driver circuitry. The row driver circuitry may include row drivers that receive power supply signals from transconductance amplifier circuitry. The transconductance amplifier circuitry may include multiple amplifiers with output ports shorted to one another. Each amplifier may include input transistors, cross-coupled transistors with a low threshold voltage, and additional transistors coupled in series with the cross-coupled transistors and having a moderate or high threshold voltage.

