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(54) **READOUT CIRCUIT AND METHOD FOR TIME-OF-FLIGHT IMAGE SENSOR**

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(57) **ABSTRACT**

A time-of-flight device comprises a pixel array including an array of pixel circuits, wherein a column of the array includes: a first pixel circuit including a first photodiode, a first capacitor and a second capacitor coupled to the first photodiode, and a second pixel circuit including a second photodiode, a third capacitor and a fourth capacitor coupled to the second photodiode, a first signal line coupled to the first capacitor, a second signal line coupled to the second capacitor, a third signal line coupled to the third capacitor, a fourth signal line coupled to the fourth capacitor, a first switch circuitry, a second switch circuitry, a first comparator coupled to the first signal line and the third signal line through the first switch circuitry, and a second comparator coupled to the second signal line and the fourth signal line through the second switch circuitry.