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LIN et al.(10) **Pub. No.: US 2022/0393678 A1**(43) **Pub. Date: Dec. 8, 2022**(54) **DRIVING CIRCUIT FOR DRIVING CHIP****Publication Classification**(71) Applicant: **SUZHOU NOVOSENSE
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(CN)(57) **ABSTRACT**

The present invention provides a driving circuit for a driving chip. The driving circuit includes a bootstrap circuit with a bootstrap voltage terminal. A power terminal of a high-voltage driving circuit is connected to the bootstrap voltage terminal, and a ground terminal of the high-voltage driving circuit is connected to a regulating terminal. A high-side drive circuit includes a high-side pull-up circuit and a high-side pull-down circuit. The driving circuit includes: an auxiliary power terminal; a mirror current source an input terminal of the mirror current source being connected to the bootstrap voltage terminal; a first MOS transistor; a second MOS transistor an equivalent diode component, an output terminal of the second MOS transistor being connected to the regulating terminal through the equivalent diode component; and an equivalent resistance component, the gate of the first MOS transistor being connected to the regulating terminal through the equivalent resistance component.

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