

(12) **Patent Application Publication**
CHEN et al.

(43) **Pub. Date:** **Jun. 27, 2024**

Publication Classification

(51) **Int. Cl.**
H03K 17/70 (2006.01)

(52) **U.S. Cl.**
CPC *H03K 17/70* (2013.01)

(57) **ABSTRACT**

A multiplexing channel switch selection circuit includes: plural channel switch circuits coupled to plural corresponding input ends and plural channel switch circuits are commonly coupled to an output end. Each channel switch circuit comprises: a switch unit and a control circuit. The control circuit includes: an analog bootstrap circuit coupled between the shared source end and the shared gate end, wherein in a situation when the channel selection signal selects the each channel switch circuit, the analog bootstrap circuit supplies an conductive bias voltage across between the shared source end and the shared gate end, to turn ON the first switch and the second switch; and a feedback regulation circuit coupled to the analog bootstrap circuit, wherein the feedback regulation circuit feedback-regulates the shared gate voltage at a constant voltage level.

(22) Filed: **Dec. 11, 2023**

Related U.S. Application Data

(60) Provisional application No. 63/476,631, filed on Dec. 21, 2022.

(30) **Foreign Application Priority Data**

Apr. 20, 2023 (CN) 202310429745.9

