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SUNG(10) **Pub. No.: US 2024/0235541 A1**(43) **Pub. Date: Jul. 11, 2024**(54) **SWITCH CIRCUIT**(71) Applicant: **REALTEK SEMICONDUCTOR CORPORATION, HSINCHU (TW)**(72) Inventor: **YA-HSUAN SUNG, Hsinchu (TW)**(21) Appl. No.: **18/536,319**(22) Filed: **Dec. 12, 2023**(30) **Foreign Application Priority Data**

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(57)

ABSTRACT

A switch circuit that has input and output terminals and a control terminal includes first to fourth transistors, a resistor, and a pull-low circuit. The first transistor has first and second terminals. The second transistor has third and fourth terminals. The third transistor has fifth and sixth terminals. The fourth transistor has seventh and eighth terminals. The first to fourth transistors have first to fourth control terminals, respectively. The resistor has ninth and tenth terminals. The control terminal is coupled to the first and fourth control terminals. The first and third terminals are coupled to the input terminal. The second and sixth terminals are coupled to the output terminal. The fourth terminal is coupled to the fifth and ninth terminals. The seventh terminal is coupled to the tenth terminal and the second and third control terminals. The eighth terminal is coupled to a reference voltage.

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