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(19) **United States**(12) **Patent Application Publication**
TABATA et al.(10) **Pub. No.: US 2024/0178654 A1**(43) **Pub. Date: May 30, 2024**(54) **POWER CUTOFF DEVICE, POWER CUTOFF
SYSTEM EQUIPPED WITH SAME, METHOD
FOR PROTECTING POWER CUTOFF
DEVICE, AND PROTECTION PROGRAM****Publication Classification**(51) **Int. Cl.****H02H 5/04** (2006.01)**G01R 31/327** (2006.01)(52) **U.S. Cl.****CPC** **H02H 5/04** (2013.01); **G01R 31/3278**
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ABSTRACT

A power cutoff device (20) comprises a power relay (21), a temperature calculation unit (22a), and a determination unit (22b). The power relay (21) includes a drive coil (21a). The temperature calculation unit (22a) calculates the temperature of the drive coil (21a) by calculating the resistance value of a resistor that changes with temperature when the drive coil (21a) included in the power relay (21) is regarded as a resistor. The determination unit (22b) determines whether or not to cut off the power supply on the basis of the temperature of the drive coil (21a) calculated by the temperature calculation unit (22a).

