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YOSHINO et al.(10) **Pub. No.: US 2022/0368323 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **PROTECTION DEVICE, LOAD DRIVE
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LTD.**, Tokyo (JP)(72) Inventors: **Yusuke YOSHINO**, Tokyo (JP);
Takashi NAKAGAMI, Tokyo (JP);
Ryo IIDA, Tokyo (JP)(57) **ABSTRACT**

There is provided a protection device capable of protecting a load drive system at an appropriate timing according to the temperature of a power semiconductor.

A protection device includes: a capacitor that outputs a voltage according to a charge accumulated by a first current; and a protection circuit that determines whether or not the voltage output by the capacitor exceeds a certain threshold value, generates a second current having a magnitude according to information related to the temperature of a power semiconductor which drives a load, and changes the magnitude of the first current based on the generated second current.

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