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(19) **United States**(12) **Patent Application Publication****Feng et al.**(10) **Pub. No.: US 2022/0360209 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **POWER TOOL**(52) **U.S. Cl.**CPC *H02P 29/60* (2016.02); *E01H 5/098* (2013.01)(71) Applicant: **Nanjing Chervon Industry Co., Ltd.**,
Nanjing (CN)(72) Inventors: **Jifeng Feng**, Nanjing (CN); **Chao Xian**, Nanjing (CN)(21) Appl. No.: **17/722,620**(22) Filed: **Apr. 18, 2022**(30) **Foreign Application Priority Data**

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E01H 5/09 (2006.01)(57) **ABSTRACT**

A power tool includes a power a motor, a driver circuit, a capacitor, a capacitor switch, a temperature detection unit, and a controller. The capacitor is configured to filter out current spikes in a power supply. The capacitor switch is configured to control a working state of the capacitor. The temperature detection unit is configured to detect a temperature of a related object. The controller is configured to: acquire the temperature of the related object; control the capacitor switch to be in a first on or off state such that the capacitor works in a first working state when the temperature is lower than a temperature threshold; and control the capacitor switch to be in a second on or off state such that the capacitor works in a second working state when the temperature is higher than the temperature threshold.

