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**Wong**(10) **Pub. No.: US 2022/0352738 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **CHARGING CONTROL METHOD OF  
POWER SUPPLY EQUIPMENT AND POWER  
SUPPLY EQUIPMENT**(52) **U.S. Cl.**  
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(2020.01); **H02J 2207/20** (2020.01)(71) Applicant: **Joulwatt Technology Co., Ltd.**,  
Hangzhou (CN)(72) Inventor: **Pitleong Wong**, Hangzhou (CN)(73) Assignee: **Joulwatt Technology Co., Ltd.**,  
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**H02J 7/00** (2006.01)(57) **ABSTRACT**

A charging control method of power supply equipment and power supply equipment are provided. The power supply equipment includes a power stage circuit and a battery. An input power supply charges the battery through the power stage circuit. The power stage circuit includes a linear regulator and a switched capacitor converter. The linear regulator is connected with the switched capacitor converter. The linear regulator and/or the switched capacitor converter are/is selected for charging management according to charging power of the battery and/or a voltage of the battery. The charging control method can achieve relatively high charging efficiency when the battery is charged with a large current, and can achieve accurate control of the voltage of the battery when the battery is charged with a small current.

