



US 20240235243A1

(19) **United States**

(12) **Patent Application Publication**
Zhao et al.

(10) **Pub. No.: US 2024/0235243 A1**

(43) **Pub. Date: Jul. 11, 2024**

(54) **POWER BATTERY VOLTAGE REGULATION
SYSTEM AND CONTROL METHOD AND
CONTROL APPARATUS THEREOF**

Publication Classification

(51) **Int. Cl.**

H02J 7/00 (2006.01)

B60L 58/10 (2006.01)

(52) **U.S. Cl.**

CPC **H02J 7/007182** (2020.01); **B60L 58/10**
(2019.02); **H02J 7/0013** (2013.01); **B60L**
2240/547 (2013.01)

(71) Applicant: **CONTEMPORARY AMPEREX
TECHNOLOGY CO., LIMITED,**
Ningde (CN)

(72) Inventors: **Yuanmiao Zhao**, Ningde (CN);
Zhanliang Li, Ningde (CN); **Yu Yan**,
Ningde (CN); **Xinwei Chen**, Ningde
(CN); **Jinfeng Gao**, Ningde (CN);
Zhimin Dan, Ningde (CN)

(21) Appl. No.: **18/619,178**

(22) Filed: **Mar. 28, 2024**

Related U.S. Application Data

(63) Continuation of application No. PCT/CN2022/
080004, filed on Mar. 9, 2022.

(57)

ABSTRACT

A power battery voltage regulation system, and a control method and control apparatus thereof are provided. The control method includes: obtaining a first voltage and a second voltage, where the first voltage is a voltage of a power battery, the second voltage is a maximum output voltage of a charging device, and the charging device is configured to connect to a charging and discharging interface.

