

# (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2023/0231144 A1 ZHU et al.

#### Jul. 20, 2023 (43) **Pub. Date:**

## (54) ELECTRODE PLATE, ELECTROCHEMICAL APPARATUS, AND ELECTRONIC **APPARATUS**

(71) Applicant: Ningde Amperex Technology Limited, Ningde (CN)

Inventors: Shan ZHU, Ningde (CN); Ting GUAN,

Ningde (CN); Fei WU, Ningde (CN); Qiao ZENG, Ningde (CN)

Assignee: Ningde Amperex Technology Limited, Ningde (CN)

(21)Appl. No.: 18/175,824

(22) Filed: Feb. 28, 2023

## Related U.S. Application Data

(63) Continuation of application No. PCT/CN2020/ 112470, filed on Aug. 31, 2020.

### **Publication Classification**

(51) Int. Cl. H01M 4/66 (2006.01)H01M 10/0525 (2006.01) H01M 4/583 (2006.01)H01M 4/62 (2006.01)

(52) U.S. Cl. CPC ...... H01M 4/667 (2013.01); H01M 4/583 (2013.01); **H01M 4/623** (2013.01); H01M 10/0525 (2013.01)

#### (57)**ABSTRACT**

An electrode plate includes: a current collector, including, in a width direction, a first edge region, a second edge region, and a middle region located between the first edge region and the second edge region; a first coating layer, including a first portion and a second portion disposed on the first edge region and the second edge region respectively; and a second coating layer. A part of the second coating layer is disposed on the middle region, another part of the second coating layer is disposed on the first coating layer. The second coating layer includes an active material. A first bonding force between the first portion and the first edge region and a second bonding force between the second portion and the second edge region are both greater than a third bonding force between the second coating layer and the middle region.

