

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213454 A1 LEE et al.

Jun. 27, 2024 (43) **Pub. Date:**

(54) ELECTRODE PLATE FOR RECHARGEABLE BATTERY, MANUFACTURING METHOD THEREOF, AND RECHARGEABLE BATTERY USING THE SAME

- (71) Applicant: SAMSUNG SDI CO., LTD., Yongin-si
- (72) Inventors: Taeil LEE, Yongin-si (KR); Won-Gi AHN, Yongin-si (KR); Juhye BAE, Yongin-si (KR); Gwangwon PARK, Yongin-si (KR); Min-young JEONG, Yongin-si (KR)
- (21) Appl. No.: 18/469,416

(30)

- (22)Filed: Sep. 18, 2023
- Dec. 26, 2022 (KR) 10-2022-0184839

Foreign Application Priority Data

Publication Classification

(51)	Int. Cl.	
	H01M 4/36	(2006.01)
	H01M 4/04	(2006.01)
	H01M 4/38	(2006.01)
	H01M 4/587	(2006.01)

(52) U.S. Cl. CPC H01M 4/366 (2013.01); H01M 4/0404 (2013.01); H01M 4/0471 (2013.01); H01M 4/386 (2013.01); H01M 4/587 (2013.01)

(57)**ABSTRACT**

An electrode plate includes an electrode current collector; a first active material layer in a pattern at the electrode current collector; and a second active material layer covering first active material layer and a portion of the electrode current collector. The electrode plate for a rechargeable battery may improve an impregnation characteristic of an electrolyte by inducing bending in a width direction of the electrode plate to improve rate capability.



