

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213501 A1 KAMM et al.

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

(54) SEPARATOR PLATE FOR AN ELECTROCHEMICAL SYSTEM, HAVING A SUPPORTING BEAD

(71) Applicant: Reinz-Dichtungs-GmbH, Neu-Ulm (DE)

(72) Inventors: Manuel KAMM, Neu-Ulm (DE); Johannes KOEBELE, Neu-Ulm (DE); Harald REBIEN, Neu-Ulm (DE); Bernd GAUGLER, Neu-Ulm (DE); Felix SENF, Ulm (DE)

(21) Appl. No.: 18/391,469

Filed:

(22)

Dec. 20, 2023 (30)Foreign Application Priority Data

Dec. 21, 2022 (DE) 20 2022 107 165.9

Publication Classification

(51) Int. Cl. H01M 8/0276 (2006.01)H01M 8/0247 (2006.01)

H01M 8/0273 (2006.01)H01M 8/2465 (2006.01)

(52) U.S. Cl.

CPC H01M 8/0276 (2013.01); H01M 8/0247 (2013.01); H01M 8/0273 (2013.01); H01M 8/2465 (2013.01)

(57)ABSTRACT

A separator plate for an electrochemical system and a bipolar plate comprising two such separator plates for an electrochemical system. An electrochemical system comprising at least two separator plates or one bipolar plate. A separator plate comprising a sealing bead for sealing off a region of the separator plate, the sealing bead having at least in sections a wavy course with at least two wave periods and a supporting bead for supporting the sealing bead. The supporting bead is spaced apart from the sealing bead and extends along the wavy course of the sealing bead. The supporting bead has a periodically changing, non-vanishing width with at least two periods, the width of the supporting bead being measured perpendicular to the direction of extension of the supporting bead and from a first outer bead foot to a second outer bead foot of the supporting bead.

