

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0231146 A1 Staffeldt et al.

(43) **Pub. Date:**

Jul. 20, 2023

(54) GRID ASSEMBLY FOR A PLATE-SHAPED BATTERY ELECTRODE OF AN ELECTROCHEMICAL ACCUMULATOR **BATTERY**

(71) Applicant: Clarios Germany GmbH & Co.KG,

Hannover (DE)

(72) Inventors: Armin Staffeldt, Lauenbruck (DE); Ingo

Koch, Hameln (DE); Bemd Ide, Hannover (DE); Ornwasa Traisigkhachol, Ronnenberg (DE)

(21) Appl. No.: 18/123,734

(22) Filed: Mar. 20, 2023

Related U.S. Application Data

(63) Continuation of application No. 17/068,575, filed on Oct. 12, 2020, now Pat. No. 11,611,082, which is a continuation of application No. 16/173,906, filed on Oct. 29, 2018, now Pat. No. 10,840,515, which is a continuation of application No. 15/027,592, filed as application No. PCT/EP2014/071556 on Oct. 8, 2014, now Pat. No. 10,170,768.

(30)Foreign Application Priority Data

Oct. 8, 2013 (DE)102013111109.2

Publication Classification

Int. Cl. H01M 4/74 (2006.01)H01M 4/72 (2006.01)H01M 4/73 (2006.01)

(52) U.S. Cl. CPC H01M 4/74 (2013.01); H01M 4/72 (2013.01); *H01M 4/73* (2013.01); H01M 2004/028 (2013.01)

(57)**ABSTRACT**

The invention relates to a grid arrangement for a plateshaped battery electrode of an electrochemical accumulator having a frame and a grid arranged thereon, wherein the frame comprises at least one upper frame element having a connecting lug of the battery electrode disposed on its side facing away from the grid, and wherein the grid is at least formed by horizontal bars, which are bars extending substantially horizontally, and vertical bars, which are bars extending substantially vertically, wherein at least some of the vertical bars are arranged at different angles to one another in the shape of a fan. The invention further relates to an accumulator.

