US 20230231251A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231251 A1**

Demont et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **BATTERY MODULE FOR ELECTRICALLY-DRIVEN AIRCRAFT**

(71) Applicant: **H55 SA**, Sion (CH)

(72) Inventors: **Sébastien Demont**, Les Agettes (CH); **Stéphane Pierre-Jean Boirin**, Montreux (CH); **Michaël Roger Fournier**, Veysonnaz (CH); **Nicolas Bosi**, Sion (CH)

(21) Appl. No.: **18/188,798**

(22) Filed: **Mar. 23, 2023**

Related U.S. Application Data

(63) Continuation-in-part of application No. PCT/IB2021/060260, filed on Nov. 5, 2021.

Publication Classification

(51) **Int. Cl.**
H01M 50/204 (2006.01)
H01M 50/284 (2006.01)

(52) **U.S. Cl.**
CPC ***H01M 50/204*** (2021.01); ***H01M 50/284*** (2021.01); *H01M 2220/20* (2013.01)

(57) **ABSTRACT**

A battery module can include multiple battery cells, multiple cell tubes, and a first plate. The multiple cell tubes can accommodate the multiple battery cells within the plurality of cell tubes so that individual of the plurality of battery cells are positioned within individual of the plurality of cell tubes. Each battery cell can have a first electric pole and a second electric pole. The first plate can include a printed circuit board. The printed circuit board can include a first conductive layer and an isolating layer. The isolating layer can include at least one blind hole for wire-bonding the conductive layer to one of the battery cells.