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**Nicholas et al.**(10) **Pub. No.: US 2023/0231221 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **TAB COOLING FOR BATTERIES**(71) Applicant: **Qdot Technology Ltd., Didcot (GB)**(72) Inventors: **Jack Nicholas, Didcot (GB); Tsun Holt Wong, Didcot (GB); Zachary Jackson, Didcot (GB); João Vieira, Didcot (GB); Daniel Fahy, Didcot (GB); Alasdair Morrison, Didcot (GB)**(21) Appl. No.: **17/998,604**(22) PCT Filed: **May 11, 2021**(86) PCT No.: **PCT/GB2021/051128**

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**ABSTRACT**

An integrated battery and cooling system (2) is provided, comprising a plurality of cells (10) and a heat sink arrangement (16). Each cell (10) comprises at least one electrical collector (27) of a first material coupled to a first electrically and thermally conductive electrical terminal (12) extending away therefrom, and at least one electrical collector (27) of a second material coupled to a second electrically and thermally conductive electrical terminal (14) extending away therefrom. The electrical terminals (12, 14) are substantially planar and form respective sidewalls of a series of elongate channels there-between. The heat sink arrangement (16) extends within each channel and is thermally coupled to at least one sidewall thereof.

