Title (en)

THERMAL MANAGEMENT FOR A CONFORMAL WEARABLE BATTERY

Title (de)

WÄRMEMANAGEMENT FÜR EINE KONFORME WEARABLE-BATTERIE

Title (fr)

GESTION THERMIQUE POUR UNE BATTERIE PORTABLE CONFORME

Publication

EP 4409678 A1 20240807 (EN)

Application

EP 22877572 A 20220929

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Abstract (en)

[origin: WO2023056359A1] A battery system with a passive thermal management system is formed from a plurality of battery cells arranged on a printed circuit board assembly. The printed circuit board assembly may include a flexible printed circuit board that is folded along an axis forming an upper and lower portion of the printed circuit board assembly. The thermal management system may include fire-blocking foam members individually attached to each battery cell along with flame-suppressant grease arranged between the battery cells. The battery cells may be arranged in a grid-like pattern to allow for a spacing arrangement between the battery cells to keep a failing battery cell from negatively affecting an adjacent battery cell. The flexible printed circuit card may include a fuse for each battery cell to shut off any current flow to a faulty battery cell if it begins to fail. The battery system may be a conformal wearable battery.

IPC 8 full level

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CPC (source: EP)

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