

Title (en)

POLYIMIDE BEAD MATERIALS AND METHODS OF MANUFACTURE THEREOF

Title (de)

POLYIMIDPERLENMATERIALIEN UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

MATÉRIAUX AVEC DES BILLES DE POLYIMIDE ET LEURS PROCÉDÉS DE FABRICATION

Publication

EP 4204137 A2 20230705 (EN)

Application

EP 21783076 A 20210823

Priority

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- US 2021047168 W 20210823

Abstract (en)

[origin: TW202218981A] Nanoporous carbon-based scaffolds or structures, and specifically carbon aerogels and their manufacture and use thereof are provided. Embodiments include a silicon-doped anode material for a lithium-ion battery, where the anode material includes beads of a polyimidederived carbon aerogel. The carbon aerogel may further include silicon particles and accommodates expansion of the silicon particles during lithiation. The anode material provides optimal properties for use within the lithium-ion battery.

IPC 8 full level

B01J 13/00 (2006.01); **C01B 32/00** (2017.01); **H01M 4/62** (2006.01)

CPC (source: EP)

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Citation (search report)

See references of WO 2022046645A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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