

Title (en)

BATTERY WITH NON-POROUS ALKALI METAL ION CONDUCTIVE HONEYCOMB STRUCTURE SEPARATOR

Title (de)

BATTERIE MIT NICHTPORÖSEM ALKALIMETALLIONENLEITENDEM WABENSEPARATOR

Title (fr)

BATTERIE À SÉPARATEUR EN STRUCTURE DE NID D'ABEILLES NON POREUX CONDUCTEUR DES IONS DE MÉTAUX ALCALINS

Publication

**EP 2834866 A4 20160120 (EN)**

Application

**EP 13773140 A 20130402**

Priority

- US 201261619170 P 20120402
- US 2013035003 W 20130402

Abstract (en)

[origin: WO2013152030A1] The present invention provides a rechargeable battery. The battery includes a honeycomb separator (20) which defines therein a plurality of cells separated from adjacent cells by thin, non-porous cell walls (30) of a substantially non-porous, alkali ion conductive ceramic membrane material. The battery includes a plurality of positive electrodes (55), each positive electrode (55) being disposed in a respective positive electrode cell (65) of the honeycomb separator (20). Each positive electrode cell (65) contains a positive electrode electrochemical material that undergoes electrochemical reduction during battery discharge and electrochemical oxidation during battery charge. Negative electrodes (50) are disposed in respective negative electrode cells (60) of the honeycomb separator (20). Each negative electrode cell (60) contains a negative electrode electrochemical material that undergoes electrochemical oxidation during battery discharge and electrochemical reduction during battery charge. The positive (55) and negative (50) electrodes are disposed in the cells of the honeycomb separator (20) in a checkerboard pattern.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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