

Title (en)
LITHIUM-ION CELL WITH A HIGH SPECIFIC ENERGY DENSITY

Title (de)
LITHIUM-IONEN-ZELLE MIT HOHER SPEZIFISCHER ENERGIEDICHTE

Title (fr)
PILE LITHIUM-ION À HAUTE DENSITÉ D'ÉNERGIE SPÉCIFIQUE

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Application
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Abstract (en)
[origin: WO2021255238A1] A lithium ion cell (100) is known comprising a strip-type electrode-separator composite (104) with the sequence: anode (120 / separator (118) / cathode (130), wherein the anode (120) and the cathode (130) each comprise a current collector (110; 115) with a first and a second longitudinal edge (110e, 115e) and the current collectors each have a main region (122, 126) provided with a layer made of the respective electrode material (123, 125), and a free edge strip (121, 117) extending along the first longitudinal edge (110e, 115e) and not provided with the electrode material. The composite (104) is provided in the form of a winding with two terminal end sides and is surrounded by a housing. The anode (120) and the cathode (130) are arranged offset within the composite (104), such that the first longitudinal edge (110) of the anode current collector passes out of one of the terminal end sides and the first longitudinal edge (115e) of the cathode current collector passes out of the other one of the terminal end sides. The cell (100) has a metal contact element (101a, 102, 155), with which one of the first longitudinal edges (110e, 115e) is in direct contact and is connected via welding. According to the invention, the separator (118) comprises at least one inorganic material which improves its resistance to thermal stress.

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See references of WO 2021255238A1

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