

Title (en)

METHOD FOR PRODUCING A LITHIUM ION BATTERY AND LITHIUM ION BATTERY

Title (de)

VERFAHREN ZUM HERSTELLEN EINER LITHIUMIONENBATTERIE SOWIE LITHIUMIONENBATTERIE

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE BATTERIE LITHIUM-ION ET BATTERIE LITHIUM-ION

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Application

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Abstract (en)

[origin: WO2022171425A1] The invention relates to a method for producing a lithium ion battery (10), comprising the following steps: a housing (11) is provided and an electrode arrangement (12) is inserted into the housing (11). The electrode arrangement (12) is formed from alternating layers of a cathode (16) and an anode (14), wherein the at least one anode (14) contains an anode active material comprising a silicon- and/or titanium-based component. At least one flexible volume compensation element (28) is situated between the electrode arrangement (12) and the housing (11), wherein the volume compensation element (28) comprises a casing (30) and an inert gas (32) accommodated within the casing (30) or an electrolyte accommodated within the casing (30), and wherein the volume compensation element (28) counteracts expansion of the electrode arrangement (12). The housing (11) is sealed to form the lithium ion battery (10). The lithium ion battery (10) is then charged, wherein the casing (30) of the volume compensation element (28) is opened to release the inert gas (32) or the electrolyte when a target expansion of the electrode arrangement (12) is reached. The invention also relates to a lithium ion battery (10).

IPC 8 full level

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