

Title (en)

METHOD OF APPLYING AN ELECTRICALLY CONDUCTING CURRENT COLLECTOR ON A SELF-SUPPORTING ELECTRODE AND ASSEMBLY OF ELECTRODE AND CURRENT COLLECTOR

Title (de)

VERFAHREN ZUM AUFBRINGEN EINER LEITFÄHIGEN STROMSAMMELSCHICHT AUF EINE SELBSTTRAGENDE ELEKTRODE, UND ELEKTRODEN-STROMKOLLEKTOR-EINHEIT

Title (fr)

PROCEDE D'APPLICATION D'UN COLLECTEUR DE COURANT ELECTRIQUEMENT CONDUCTEUR SUR UNE ELECTRODE AUTOPORTANTE ET ENSEMBLE D'ELECTRODE ET DE COLLECTEUR DE COURANT

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Abstract (en)

[origin: WO0060685A1] The invention relates to physical or chemical vapor deposition, such as evaporation, of a metal current collector on a self-supporting electrode. Such an electrode can be used in Li ion rechargeable batteries. The invention is characterized in that the electrically conducting layer forming the current collector is provided such that the electrically conducting layer follows the surface of the electrode on account of the fact that said layer is formed on said surface in situ. Electrically conducting current collectors may thus be provided an anode and cathode materials by various techniques, such as physical or chemical vapor deposition, sputtering or electroplating, the physical vapor deposition being preferred on account of the good surface contact between the electrode and the current collector. The invention further relates to a battery built up from, in that order, a current collector, an anode, a separator, a cathode, a current collector, and an electrolyte, which battery according to the present invention is characterized in that at least of the component parts: current collector/anode and current collector/cathode is an assembly according to the invention.

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