

Title (en)
PROCESS FOR FABRICATING A SILICON-BASED ELECTRODE, SILICON-BASED ELECTRODE AND LITHIUM BATTERY COMPRISING SUCH AN ELECTRODE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER ELEKTRODE AUF SILICIUMBASIS, ELEKTRODE AUF SILICIUMBASIS UND LITHIUMBATTERIE MIT DERARTIGER ELEKTRODE

Title (fr)
PROCEDE DE FABRICATION D'UNE ELECTRODE A BASE DE SILICIUM, ELECTRODE A BASE DE SILICIUM ET BATTERIE AU LITHIUM COMPRENANT UNE TELLE ELECTRODE

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Abstract (en)
[origin: WO2009112714A2] The invention relates to a process for manufacturing a silicon-based electrode and to a silicon-based electrode. It also relates to a lithium battery comprising such an electrode. The process of the invention consists in fabricating a silicon-based electrode of the type that includes a step of electrochemically depositing silicon on a substrate by cyclic voltammetry in a solution comprising at least one ionic liquid and a silicon precursor of formula $\text{Si}_x\text{X}_{2n+2}$, in which x is Cl, Br or I and n is equal to 1 or 2. The electrode of the invention is particularly applicable in the lithium battery field.

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