

Title (en)
ZWISCHEN 1,8VOLT UND

Title (de)
ZWISCHEN 1,8 VOLT UND 4,3 VOLT WIRKENDE LITHIUM-BATTERIE

Title (fr)
ACCUMULATEUR AU LITHIUM FONCTIONNANT ENTRE 1,8 VOLTS ET 4,3 VOLTS

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Application
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Abstract (en)
[origin: FR2777387A1] The invention concerns a lithium battery operating between 1.8 volts and 4.3 volts and comprising a negative electrode, an electrolyte and a positive electrode characterised in that said positive electrode comprises as active material, and before it has been subjected to a particular charging or discharging operation, a manganese oxide containing lithium or extra lithium having a spine structure obtainable by a preparation method comprising the following three steps performed successively or simultaneously: preparing a lithium alkoxide solution by dissolving metal lithium in the corresponding alcohol, said alcohol being selected among the alcohols derived from linear or branched alkanes containing at least 3 carbon atoms, the alcohols derived from unsaturated aliphatic hydrocarbons, and their mixtures; adding a manganese oxide powder to said lithium alkoxide solution to obtain a dispersion; controlled reduction of said manganese oxide by said alkoxide until a manganese oxide containing lithium or extra lithium having a stoichiometry Li: Metal is obtained. Said method further comprises the following steps: evaporating the residual alcohol; washing the resulting powder; drying the powder; optionally, an additional step of heat treatment after drying.

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