

Title (en)
COMPOSITE CATHODE MATERIALS HAVING IMPROVED CYCLE LIFE

Title (de)
ZUSAMMENGESETZTE KATHODENMATERIALIEN MIT VERBESSERTER LEBENSDAUER

Title (fr)
MATÉRIAUX DE CATHODE COMPOSITES À DURÉE DE VIE AMÉLIORÉE

Publication
EP 2973801 A1 20160120 (EN)

Application
EP 13879049 A 20130315

Priority
US 2013031996 W 20130315

Abstract (en)
[origin: WO2014149020A1] Lithiated composite materials and methods of manufacture are provided that are capable of imparting excellent capacity and greatly improved cycle life in lithium-ion secondary cells. By supplementing a high nickel content lithium storage material with a transition metal oxide lithium storage material or a dopant at relatively low levels, the capacity of the high nickel content lithium storage materials is maintained while cycle life is dramatically improved. These characteristics are promoted by methods of producing the materials that intermix unlithiated precursor materials with a lithium source and sintering the materials together in a single sintering reaction. The resulting lithiated composite materials provide for the first time both high capacity and excellent cycle life to predominantly high nickel content electrodes.

IPC 8 full level
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CPC (source: EP)
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