

Title (en)
VANADIUM OXIDE PARTICLES AND BATTERIES WITH ELECTROACTIVE NANOPARTICLES

Title (de)
VANADIUM OXID TEILCHEN UND BATTERIEN MIT ELEKTROAKTIVEN NANOPARTIKELN

Title (fr)
PARTICULES D'OXYDE DE VANADIUM ET BATTERIES AVEC NANOPARTICULES ELECTROACTIVES

Publication
EP 1016149 A4 20011121 (EN)

Application
EP 98935816 A 19980720

Priority

- US 9814947 W 19980720
- US 89777697 A 19970721
- US 89777897 A 19970721
- US 89790397 A 19970721

Abstract (en)
[origin: WO9904441A1] Vanadium oxide nanoparticles with different vanadium oxidation states and different crystal structures. The particles have a narrow distribution of particle diameters and unique properties that result from their small size and correspondingly large surface area. The particles are produced by laser pyrolysis, and can be further treated to change their properties, without destroying their nanoscale size. The stoichiometry and crystal structure can be varied by initial heating under mild conditions. The materials may be used as cathode active materials in high energy density batteries.

IPC 1-7
H01M 4/48; **C01G 31/02**

IPC 8 full level
C01G 31/02 (2006.01); **H01M 4/48** (2010.01); **H01M 4/485** (2010.01); **H01M 4/58** (2010.01); **H01M 4/02** (2006.01); **H01M 4/62** (2006.01); **H01M 10/0525** (2010.01); **H01M 10/36** (2010.01)

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Citation (search report)

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- [DXA] HIBINO M ET AL: "Preparation and lithium intercalation of a new vanadium oxide with a two-dimensional structure", SOLID STATE IONICS, NORTH HOLLAND PUB. COMPANY. AMSTERDAM, NL, VOL. 79, PAGE(S) 239-244, ISSN: 0167-2738, XP004050349
- See references of WO 9904441A1

Designated contracting state (EPC)
DE FR

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