

Title (en)

NICKEL HYDROXIDE ACTIVE MATERIAL FOR ELECTRO CHEMICAL CELLS

Title (de)

AKTIVES NICKEL-HYDROXID-MATERIAL FÜR ELEKTRO-CHEMISCHE ZELLEN

Title (fr)

MATIERE ACTIVE D'HYDROXYDE DE NICKEL POUR CELLULES ELECTROCHIMIQUES

Publication

EP 1027742 A1 20000816 (EN)

Application

EP 99942286 A 19990819

Priority

- US 9918782 W 19990819
- US 14845198 A 19980904

Abstract (en)

[origin: WO0014818A1] An alpha phase nickel hydroxide active material for use in the positive electrodes of rechargeable alkaline electrochemical cells in which the material comprises nickel and hydroxide constituents and first and second stabilizing cations. The first stabilizing cation is selected from the group comprising: Al, Co, La, Ce, Y, Nd, Mg, In and Mn. The second stabilizing cation is selected from the group comprising: Mg, Zn, Co, Sr, Y, Nd, La, Ce and In. The alpha phase material exhibits an increased discharge plateau voltage profile, is structurally stable and possesses multi-electron per nickel atom transfer capabilities. The higher discharge plateau voltage and improved storage capacity translates into a significant increase in specific energy density and power density in operating cells.

IPC 1-7

H01M 4/32; **H01M 4/26**

IPC 8 full level

C01G 53/00 (2006.01); **C01G 53/04** (2006.01); **H01M 4/26** (2006.01); **H01M 4/32** (2006.01); **H01M 4/52** (2010.01); **H01M 10/30** (2006.01)

CPC (source: EP)

C01G 53/006 (2013.01); **C01G 53/04** (2013.01); **H01M 4/32** (2013.01); **H01M 4/52** (2013.01); **C01P 2002/72** (2013.01); **C01P 2002/82** (2013.01); **C01P 2002/88** (2013.01); **C01P 2006/40** (2013.01); **H01M 10/30** (2013.01); **Y02E 60/10** (2013.01)

Citation (search report)

See references of WO 0014818A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0014818 A1 20000316; CN 1287693 A 20010314; EP 1027742 A1 20000816; JP 2002524832 A 20020806

DOCDB simple family (application)

US 9918782 W 19990819; CN 99801730 A 19990819; EP 99942286 A 19990819; JP 2000569460 A 19990819