

## Title (en)

NICKEL HYDROXIDE POSITIVE ELECTRODE FOR ALKALINE RECHARGEABLE BATTERY

## Title (de)

NICKELHYDROXID-POSITIVELEKTRODE FÜR ALKALIAKKUMULATOR

## Title (fr)

ÉLECTRODE POSITIVE À BASE D'HYDROXYDE DE NICKEL POUR PILE ALCALINE RECHARGEABLE

## Publication

**EP 3254322 A4 20190220 (EN)**

## Application

**EP 16747067 A 20160202**

## Priority

- US 201514614753 A 20150205
- US 201514614838 A 20150205
- US 2016016041 W 20160202

## Abstract (en)

[origin: WO2016126622A1] A nickel hydroxide cathode active material for use in an alkaline rechargeable electrochemical cell, which active material is capable of transferring >1.67 electrons per Ni atom. A nickel hydroxide cathode active material for use in an alkaline rechargeable electrochemical cell, where the specific capacity of the material is  $\geq 330$  mAh/g. A nickel hydroxide cathode active material for use in an alkaline rechargeable electrochemical cell, where Ni reaches an oxidation state of less than +2 during charge/discharge cycling of an alkaline rechargeable cell.

## IPC 8 full level

**H01M 4/32** (2006.01); **H01M 4/52** (2010.01); **H01M 4/62** (2006.01); **H01M 10/30** (2006.01); **H01M 10/34** (2006.01); **C01G 53/04** (2006.01)

## CPC (source: EP)

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## Citation (search report)

- [XA] NAKAMICHI YAMASAKI ET AL: "Reduction kinetics of Ni(OH)<sub>2</sub> to nickel powder preparation under hydrothermal conditions", METALLURGICAL AND MATERIALS TRANSACTIONS B - PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, vol. 24, no. 4, 1 August 1993 (1993-08-01), United States, pages 557 - 561, XP055540716, ISSN: 0360-2141, DOI: 10.1007/BF02673170
- [XAI] Y.L. ZHAO ET AL: "Different additives-substituted [alpha]-nickel hydroxide prepared by urea decomposition", ELECTROCHIMICA ACTA., vol. 50, no. 1, 20 August 2004 (2004-08-20), GB, pages 91 - 98, XP055540726, ISSN: 0013-4686, DOI: 10.1016/j.electacta.2004.07.016
- [XA] Z.J. ZHANG ET AL: "Electrochemical performance of multi-element doped [alpha]-nickel hydroxide prepared by supersonic co-precipitation method", JOURNAL OF ALLOYS AND COMPOUNDS., vol. 509, no. 25, 29 March 2011 (2011-03-29), CH, pages 7034 - 7037, XP055540736, ISSN: 0925-8388, DOI: 10.1016/j.jallcom.2011.03.104
- [XA] CAIYUN WANG: "Cathodic materials for nickel-metal hydride batteries", 1 January 2003 (2003-01-01), pages 1 - 176, XP055540769, Retrieved from the Internet <URL:http://ro.uow.edu.au/theses/192> [retrieved on 20190111]
- See also references of WO 2016126622A1

## Designated contracting state (EPC)

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## DOCDB simple family (publication)

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## DOCDB simple family (application)

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