

Title (en)  
NEGATIVE ACTIVE MATERIAL FOR SECONDARY BATTERY, AND ELECTRODE AND SECONDARY BATTERY INCLUDING THE SAME

Title (de)  
NEGATIV-AKTIVMATERIAL FÜR EINE SEKUNDÄRBATTERIE UND ELEKTRODE UND SEKUNDÄRBATTERIE DAMIT

Title (fr)  
MATÉRIAU ACTIF NÉGATIF DESTINÉ À UNE BATTERIE RECHARGEABLE, ET ÉLECTRODE ET BATTERIE RECHARGEABLE COMPRENANT CE MATÉRIAU

Publication  
**EP 2266157 A4 20130130 (EN)**

Application  
**EP 08873866 A 20081219**

Priority

- KR 2008007549 W 20081219
- KR 20080033166 A 20080410

Abstract (en)  
[origin: WO2009125909A1] A negative active material for a secondary battery according to the present invention includes a core carbon material and a carbide layer formed on at least a portion of an edge of the core carbon material, and has a difference (an amount of compression density change) of 0.5g/cc or more between a first compression density measured when a pressure of 63.704 MPa is applied for 2 seconds and a second compression density measured when a pressure of 6.3704 MPa is applied for 2 seconds. A secondary battery manufactured using the negative active material according to the present invention can prevent deterioration of characteristics caused by destruction of the carbide layer during a compression process in the manufacture of an electrode of a secondary battery. As a result, a cycle efficiency and a discharging capacity retention rate at a long cycle can be improved.

IPC 8 full level  
**H01M 4/36** (2006.01); **H01M 4/1393** (2010.01); **H01M 4/58** (2010.01); **H01M 4/587** (2010.01); **H01M 10/0525** (2010.01); **H01M 10/36** (2010.01)

CPC (source: EP KR)  
**H01M 4/13** (2013.01 - KR); **H01M 4/1393** (2013.01 - EP); **H01M 4/583** (2013.01 - KR); **H01M 4/587** (2013.01 - EP); **H01M 10/0525** (2013.01 - EP KR); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [A] JP 2004031038 A 20040129 - NIPPON CARBON CO LTD
- [A] KR 100817977 B1 20080331 - LS CABLE LTD [KR] & WO 2008136561 A1 20081113 - LS MTRON LTD [KR], et al
- See references of WO 2009125909A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2009125909 A1 20091015**; CN 102057524 A 20110511; EP 2266157 A1 20101229; EP 2266157 A4 20130130; JP 2010522969 A 20100708; KR 100936571 B1 20100113; KR 20090107740 A 20091014

DOCDB simple family (application)  
**KR 2008007549 W 20081219**; CN 200880129223 A 20081219; EP 08873866 A 20081219; JP 2010507341 A 20081219; KR 20080033166 A 20080410