

Title (en)
COMPOSITE MATERIALS FOR LITHIUM-SULFUR BATTERIES

Title (de)
KOMPOSITMATERIALIEN FÜR LITHIUM-SCHWEFEL BATTERIEN

Title (fr)
MATÉRIAUX COMPOSITES POUR BATTERIES LITHIUM-SOUFRE

Publication
EP 2885831 A4 20160413 (DE)

Application
EP 13829434 A 20130805

Priority

- EP 12180398 A 20120814
- IB 2013056393 W 20130805
- EP 13829434 A 20130805

Abstract (en)
[origin: WO2014027272A2] The present invention relates to sulfur-carbon composite materials comprising (A) at least one carbon composite material comprising (a) a carbonization product of at least one carbonaceous starting material, incorporating (aa) particles of at least one electrically conductive additive, the particles having an aspect ratio of at least 10, and (B) elemental sulfur. In addition, the present invention also relates to a process for producing inventive sulfur-carbon composite materials, to cathode materials for electrochemical cells comprising inventive sulfur- carbon composite materials, to corresponding electrochemical cells and to the use of carbon composite materials for production of electrochemical cells.

IPC 8 full level
H01M 4/133 (2010.01); **H01M 4/136** (2010.01); **H01M 4/1393** (2010.01); **H01M 4/38** (2006.01); **H01M 4/62** (2006.01); **H01M 10/0525** (2010.01); **H01M 10/0568** (2010.01); **H01M 10/0569** (2010.01)

CPC (source: CN EP KR)
H01M 4/133 (2013.01 - CN EP KR); **H01M 4/136** (2013.01 - CN EP KR); **H01M 4/38** (2013.01 - CN EP); **H01M 4/381** (2013.01 - KR); **H01M 4/587** (2013.01 - KR); **H01M 4/624** (2013.01 - CN EP KR); **H01M 4/625** (2013.01 - CN EP KR); **H01M 4/626** (2013.01 - CN EP KR); **H01M 10/0525** (2013.01 - CN EP KR); **H01M 10/0568** (2013.01 - KR); **H01M 10/0569** (2013.01 - KR); **H01M 10/0568** (2013.01 - CN EP); **H01M 10/0569** (2013.01 - CN EP); **H01M 2220/10** (2013.01 - KR); **H01M 2220/20** (2013.01 - KR); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

- [XA] CN 101891930 A 20101124 - UNIV SHANGHAI JIAOTONG
- [A] US 2011206992 A1 20110825 - CAMPBELL CHRISTOPHER T S [US], et al
- [A] WO 2011156925 A2 20111222 - NAZAR LINDA FAYE [CA], et al
- See references of WO 2014027272A2

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

DOCDB simple family (publication)
WO 2014027272 A2 20140220; WO 2014027272 A3 20141030; CN 104541391 A 20150422; EP 2885831 A2 20150624; EP 2885831 A4 20160413; JP 2015531967 A 20151105; KR 20150043407 A 20150422

DOCDB simple family (application)
IB 2013056393 W 20130805; CN 201380042885 A 20130805; EP 13829434 A 20130805; JP 2015527039 A 20130805; KR 20157006270 A 20130805