

Title (en)  
ELECTRODE COMPOSITION AND PREPARATION PROCESS FOR LITHIUM-ION BATTERY, ELECTRODE AND BATTERY INCORPORATING SAME

Title (de)  
ELEKTRODENZUSAMMENSETZUNG UND HERSTELLUNGSVERFAHREN FÜR LITHIUM-IONEN-BATTERIE, ELEKTRODE UND BATTERIE DAMIT

Title (fr)  
COMPOSITION D'ELECTRODE ET PROCEDE DE PREPARATION POUR BATTERIE LITHIUM-ION, ELECTRODE ET BATTERIE L'INCORPORANT

Publication  
**EP 3695448 A1 20200819 (FR)**

Application  
**EP 18796089 A 20181008**

Priority  
• FR 1759446 A 20171009  
• FR 2018052482 W 20181008

Abstract (en)  
[origin: WO2019073160A1] The invention relates to an electrode composition for lithium-ion battery, a process for preparing the composition, such an electrode and a lithium-ion battery incorporating same. The composition comprises an active substance able to perform reversible insertion/deinsertion of lithium in the electrode, an electrically conductive filler and a polymeric binder comprising at least one modified polyolefin, and it is such that the modified polyolefin (If1) is derived from a nonpolar aliphatic polyolefin and incorporates oxygenated CO and OH groups, having a content by weight of oxygen atoms of between 2% and 10% inclusive. The modified polyolefin may be the product of a controlled thermal oxidation reaction, under an atmosphere comprising oxygen and at a temperature of between 200° C and 300° C, of the nonpolar aliphatic polyolefin with oxygen.

IPC 8 full level  
**H01M 4/04** (2006.01); **H01M 4/1315** (2010.01); **H01M 4/133** (2010.01); **H01M 4/62** (2006.01); **H01M 10/0525** (2010.01)

CPC (source: EP KR US)  
**H01M 4/0404** (2013.01 - EP); **H01M 4/131** (2013.01 - KR); **H01M 4/1315** (2013.01 - EP); **H01M 4/133** (2013.01 - EP KR); **H01M 4/364** (2013.01 - US); **H01M 4/505** (2013.01 - US); **H01M 4/525** (2013.01 - US); **H01M 4/583** (2013.01 - US); **H01M 4/622** (2013.01 - EP KR US); **H01M 4/625** (2013.01 - EP KR); **H01M 4/661** (2013.01 - US); **H01M 10/0525** (2013.01 - EP KR US); **H01M 10/44** (2013.01 - US); **Y02E 60/10** (2013.01 - EP)

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**FR 3072214 A1 20190412**; CN 111512476 A 20200807; CN 111512476 B 20230801; EP 3695448 A1 20200819; JP 2020537292 A 20201217; JP 7403443 B2 20231222; KR 20200083485 A 20200708; US 2020343548 A1 20201029; WO 2019073160 A1 20190418

DOCDB simple family (application)  
**FR 1759446 A 20171009**; CN 201880075278 A 20181008; EP 18796089 A 20181008; FR 2018052482 W 20181008; JP 2020519980 A 20181008; KR 20207013344 A 20181008; US 201816754276 A 20181008