

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

Title (de)
KATHODENZUSAMMENSETZUNG FÜR LITHIUM-IONEN-BATTERIE, VERFAHREN ZU IHRER HERSTELLUNG, KATHODE UND LITHIUM-IONEN-BATTERIE MIT DIESER ZUSAMMENSETZUNG

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

Publication
EP 3695449 A1 20200819 (FR)

Application
EP 18808408 A 20180927

Priority
• FR 1759445 A 20171009
• FR 2018052384 W 20180927

Abstract (en)
[origin: WO2019073140A1] The invention relates to a cathode composition for use in a lithium-ion battery, a process for preparing this composition, such a cathode and a lithium-ion battery incorporating this cathode. The composition comprises an active material which comprises an alloy of lithiated oxides of nickel, cobalt and aluminium, an electrically conductive filler and a polymeric binder, and is such that said polymeric binder comprises at least one modified polymer (Id2) which is the product of a thermal oxidation reaction of a starting polymer and which incorporates oxygenated groups comprising CO groups, the composition being able to be obtained by the melt route and without solvent evaporation, being the product of said thermal oxidation reaction applied to a precursor mixture comprising said active material, said electrically conductive filler, said starting polymer and a sacrificial polymeric phase.

IPC 8 full level
H01M 4/131 (2010.01); **H01M 4/1391** (2010.01); **H01M 4/62** (2006.01); **H01M 10/0525** (2010.01)

CPC (source: EP KR US)
H01M 4/0466 (2013.01 - US); **H01M 4/131** (2013.01 - EP KR); **H01M 4/1391** (2013.01 - EP KR); **H01M 4/1399** (2013.01 - US); **H01M 4/525** (2013.01 - US); **H01M 4/622** (2013.01 - EP KR US); **H01M 4/624** (2013.01 - EP KR); **H01M 4/625** (2013.01 - US); **H01M 4/661** (2013.01 - US); **H01M 10/0525** (2013.01 - EP KR US); **H01M 10/0569** (2013.01 - US); **H01M 4/0404** (2013.01 - EP KR); **H01M 2004/021** (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 3072213 A1 20190412; CN 111512477 A 20200807; CN 111512477 B 20231117; EP 3695449 A1 20200819; JP 2020537294 A 20201217; JP 7515397 B2 20240712; KR 20200083484 A 20200708; US 11817579 B2 20231114; US 2020358095 A1 20201112; WO 2019073140 A1 20190418

DOCDB simple family (application)
FR 1759445 A 20171009; CN 201880075245 A 20180927; EP 18808408 A 20180927; FR 2018052384 W 20180927; JP 2020520018 A 20180927; KR 20207013343 A 20180927; US 201816754606 A 20180927