

Title (en)
PRODUCING LITHIUM

Title (de)
HERSTELLUNG VON LITHIUM

Title (fr)
PRODUCTION DE LITHIUM

Publication
EP 3167099 A4 20180321 (EN)

Application
EP 15819217 A 20150709

Priority
• US 201414328613 A 20140710
• US 2015039768 W 20150709
• US 201361844482 P 20130710

Abstract (en)
[origin: US2015014184A1] A electrolytic process for continuous production of lithium metal from lithium carbonate or other lithium salts by use of an aqueous acid electrolyte and a lithium producing cell structure which includes: a cell body with a cathode within the cell body; an electrolyte aqueous solution within the cell body, the solution containing lithium ion and an anion; and a composite layer intercalated between the cathode and the electrolyte aqueous solution, the composite layer comprising a lithium ion conductive glass ceramic (LI-GC) and a lithium ion conductive barrier film (LI-BF) that isolates cathode-forming lithium from the electrolyte aqueous solution.

IPC 8 full level
C25C 7/04 (2006.01)

CPC (source: EP KR US)
C25C 1/02 (2013.01 - EP KR US); **C25C 7/007** (2013.01 - EP KR US); **C25C 7/04** (2013.01 - EP KR US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)
• [XY] US 2005100793 A1 20050512 - JONGHE LUTGARD D [US], et al
• [Y] CN 103031568 A 20130410 - QINGDAO INST BIOENERGY & BIOPROCESS TECHNOLOGY CAS
• [Y] US 2009134040 A1 20090528 - GORDON JOHN HOWARD [US], et al
• [Y] YOUNG-SOO KIM ET AL: "A physical organogel electrolyte: characterized by in situ thermo-irreversible gelation and single-ion-predominant conduction", SCIENTIFIC REPORTS, vol. 3, 29 May 2013 (2013-05-29), XP055251919, DOI: 10.1038/srep01917
• See references of WO 2016007761A1

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)
US 2015014184 A1 20150115; AU 2015287769 A1 20170202; AU 2015287769 B2 20200312; CA 2954639 A1 20160114; CN 106574386 A 20170419; EP 3167099 A1 20170517; EP 3167099 A4 20180321; JP 2017528603 A 20170928; JP 2021063301 A 20210422; JP 6866289 B2 20210428; KR 20170028424 A 20170313; US 2020149174 A1 20200514; WO 2016007761 A1 20160114

DOCDB simple family (application)
US 201414328613 A 20140710; AU 2015287769 A 20150709; CA 2954639 A 20150709; CN 201580037710 A 20150709; EP 15819217 A 20150709; JP 2017522453 A 20150709; JP 2020218347 A 20201228; KR 20177003400 A 20150709; US 2015039768 W 20150709; US 202016743602 A 20200115