

Title (en)
SELF-LIMITING ELECTROLYTE-FILLING PROCESS

Title (de)
SELBSTLIMITIERENDES ELEKTROLYT-BEFÜLLVERFAHREN

Title (fr)
PROCÉDÉ DE REMPLISSAGE AUTO-LIMITÉ D'ÉLECTROLYTE

Publication
EP 2867939 A1 20150506 (DE)

Application
EP 13730257 A 20130621

Priority

- DE 102012211153 A 20120628
- EP 2013062971 W 20130621

Abstract (en)
[origin: WO2014001212A1] The invention relates to a process for producing an electrochemical cell, in particular a secondary battery or a double-layer capacitor, in which a cell vessel containing at least one porous cell component is filled with a flowable electrolyte. It is based on the object of providing a process that involves simpler apparatus and, in the interests of optimum filling, reacts to the varying free volume with an adapted filling rate of electrolyte. This object is achieved by overfilling with electrolyte, in which the porous cell component is completely submerged, in a first filling step, applying to the filled electrolyte a force that drives out of the cell vessel the part of the electrolyte that is not located in the pores of the porous component, and topping up with electrolyte in a second filling step.

IPC 8 full level
H01M 10/0525 (2010.01); **H01M 50/609** (2021.01)

CPC (source: CN EP KR US)
H01G 11/14 (2013.01 - CN EP KR US); **H01G 11/22** (2013.01 - US); **H01G 11/52** (2013.01 - US); **H01G 11/54** (2013.01 - CN EP KR US); **H01G 11/58** (2013.01 - US); **H01G 11/80** (2013.01 - KR); **H01G 11/84** (2013.01 - CN EP KR US); **H01M 4/13** (2013.01 - US); **H01M 4/139** (2013.01 - US); **H01M 10/0525** (2013.01 - CN EP KR US); **H01M 50/609** (2021.01 - CN EP KR US); **H01M 50/691** (2021.01 - CN EP KR US); **H01G 11/80** (2013.01 - CN EP US); **H01M 2220/20** (2013.01 - US); **Y02E 60/10** (2013.01 - EP KR); **Y02E 60/13** (2013.01 - EP KR US); **Y02P 70/50** (2015.11 - EP KR)

Citation (search report)
See references of WO 2014001212A1

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)
WO 2014001212 A1 20140103; CN 104937745 A 20150923; DE 102012211153 A1 20140410; EP 2867939 A1 20150506; JP 2015527696 A 20150917; KR 20150033677 A 20150401; US 2015287548 A1 20151008

DOCDB simple family (application)
EP 2013062971 W 20130621; CN 201380045352 A 20130621; DE 102012211153 A 20120628; EP 13730257 A 20130621; JP 2015518998 A 20130621; KR 20157001875 A 20130621; US 201314411307 A 20130621