

Title (en)  
ELECTROLYTE SYNTHESIS FOR ULTRACAPACITORS

Title (de)  
ELEKTROLYTSYNTHESE FÜR ULTRAKONDENSATOREN

Title (fr)  
SYNTHÈSE D'ÉLECTROLYTE POUR ULTRA-CONDENSATEURS

Publication  
**EP 2923407 A1 20150930 (EN)**

Application  
**EP 13795975 A 20131115**

Priority

- US 201213682211 A 20121120
- US 201313842898 A 20130315
- US 201313909645 A 20130604
- US 2013070293 W 20131115

Abstract (en)  
[origin: WO2014081628A1] A method of forming an electrolyte solution involves combining ammonium tetrafluoroborate and a quaternary ammonium halide in a liquid solvent to form a quaternary ammonium tetrafluoroborate and an ammonium halide. The ammonium halide precipitate is removed from the solvent to form an electrolyte solution. The reactants can be added step-wise to the solvent, and the method can include using a stoichiometric excess of the ammonium tetrafluoroborate to form a substantially halide ion-free electrolyte solution.

IPC 8 full level  
**H01M 10/05** (2010.01); **H01M 10/0525** (2010.01); **H01M 10/056** (2010.01)

CPC (source: EP)  
**H01G 11/58** (2013.01); **H01G 11/62** (2013.01); **H01M 10/0525** (2013.01); **H01M 2300/0025** (2013.01); **Y02E 60/10** (2013.01); **Y02E 60/13** (2013.01)

Citation (search report)  
See references of WO 2014081628A1

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 2014081628 A1 20140530**; CN 105264707 A 20160120; EP 2923407 A1 20150930; JP 2016500200 A 20160107; KR 20150140267 A 20151215; TW 201423790 A 20140616; TW I584318 B 20170521

DOCDB simple family (application)  
**US 2013070293 W 20131115**; CN 201380060679 A 20131115; EP 13795975 A 20131115; JP 2015542818 A 20131115; KR 20157016441 A 20131115; TW 102142287 A 20131120