

Title (en)
SODIUM-HALOGEN SECONDARY CELL

Title (de)
NATRIUMHALOGENSEKUNDÄRZELLE

Title (fr)
CELLULE ÉLECTROCHIMIQUE AU SODIUM/HALOGÈNE

Publication
EP 3042415 A4 20170503 (EN)

Application
EP 14842956 A 20141009

Priority
• US 201314019651 A 20130906
• US 201361888933 P 20131009
• US 2014059954 W 20141009

Abstract (en)
[origin: WO2015035427A1] A sodium-halogen secondary cell that includes a negative electrode compartment housing a negative, sodium-based electrode and a positive electrode compartment housing a current collector disposed in a liquid positive electrode solution. The liquid positive electrode solution includes a halogen and/or a halide. The cell includes a sodium ion conductive electrolyte membrane that separates the negative electrode from the liquid positive electrode solution. Although in some cases, the negative sodium-based electrode is molten during cell operation, in other cases, the negative electrode includes a sodium electrode or a sodium intercalation carbon electrode that is solid during operation.

IPC 8 full level
H01M 10/36 (2010.01); **H01M 4/58** (2010.01); **H01M 6/18** (2006.01); **H01M 8/18** (2006.01); **H01M 10/39** (2006.01); **H01M 10/0562** (2010.01)

CPC (source: EP KR)
H01M 4/582 (2013.01 - EP KR); **H01M 6/18** (2013.01 - EP KR); **H01M 8/18** (2013.01 - KR); **H01M 10/39** (2013.01 - EP KR); **H01M 8/18** (2013.01 - EP); **H01M 2300/0077** (2013.01 - EP KR); **Y02E 60/10** (2013.01 - EP KR); **Y02E 60/50** (2013.01 - EP)

Citation (search report)
• [XPA] WO 2014039762 A1 20140313 - CERAMATEC INC [US]
• [XA] US 3918991 A 19751111 - HESS HEINRICH J
• [T] HIDETO SAKANE ET AL: "X A F S A n a l y s i s o f T r i i o d i d e l o n i n Solutions", J. SYNCHROTRON RAD, 31 December 2001 (2001-12-31), pages 674 - 676, XP055358837, Retrieved from the Internet <URL:https://doi.org/10.1107/S0909049500017179> [retrieved on 20170327], DOI: https://doi.org/10.1107/S0909049500017179
• See references of WO 2015035427A1

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

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WO 2015035427 A1 20150312; EP 3042415 A1 20160713; EP 3042415 A4 20170503; JP 2016534528 A 20161104; KR 20160096071 A 20160812

DOCDB simple family (application)
US 2014059954 W 20141009; EP 14842956 A 20141009; JP 2016540948 A 20141009; KR 20167008665 A 20141009