

Title (en)  
SYSTEMS AND METHODS USING ANODES

Title (de)  
SYSTEME UND VERFAHREN MIT ANODEN

Title (fr)  
SYSTÈMES ET PROCÉDÉS UTILISANT DES ANODES

Publication  
**EP 3219829 A1 20170920 (EN)**

Application  
**EP 17150726 A 20130313**

Priority  
• US 201261617390 P 20120329  
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• EP 13769321 A 20130313

Abstract (en)  
There are provided methods and systems for an electrochemical cell including an anode and a cathode where the anode is contacted with a metal ion that converts the metal ion from a lower oxidation state to a higher oxidation state. The anode is a corrugated porous anode (corrugation amplitude 1 to 8 mm, corrugation period 2 to 35 mm).

IPC 8 full level  
**C25B 11/02** (2006.01); **C25B 9/00** (2006.01); **C25B 15/08** (2006.01)

CPC (source: CN EP)  
**C25B 1/00** (2013.01 - CN); **C25B 1/02** (2013.01 - CN); **C25B 3/27** (2021.01 - CN); **C25B 9/00** (2013.01 - CN EP); **C25B 11/02** (2013.01 - EP); **C25B 15/08** (2013.01 - CN EP)

Citation (applicant)  
US 4908198 A 19900313 - WEINBERG NORMAN L [US]

Citation (search report)  
• [YP] WO 2012158969 A1 20121122 - CALERA CORP [US], et al  
• [Y] US 5296107 A 19940322 - HARRISON STEPHEN [CA]  
• [Y] JP 2000199093 A 20000718 - EKOWAADO KK

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US2023055027A1; US11939683B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2013148216 A1 20131003**; CN 104271810 A 20150107; CN 104271810 B 20170503; CN 107254689 A 20171017;  
EP 2831313 A1 20150204; EP 2831313 A4 20150610; EP 2831313 B1 20170503; EP 3219829 A1 20170920; JP 2015522706 A 20150806;  
JP 2017075398 A 20170420; JP 6039054 B2 20161207

DOCDB simple family (application)  
**US 2013031064 W 20130313**; CN 201380024643 A 20130313; CN 201710352177 A 20130313; EP 13769321 A 20130313;  
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