

Title (en)
ELECTROCHEMICAL PROCESS TO RECYCLE AQUEOUS ALKALI CHEMICALS USING CERAMIC ION CONDUCTING SOLID MEMBRANES

Title (de)
ELEKTROCHEMISCHES VERFAHREN ZUR REZYKLIERUNG VON WÄSSRIGEN ALKALICHEMIKALIEN UNTER VERWENDUNG VON KERAMISCHEN IONENLEITENDEN FESTMEMBRANEN

Title (fr)
PROCÉDÉ ÉLECTROCHIMIQUE POUR RECYCLER DES PRODUITS CHIMIQUES ALCALINS AQUEUX À L'AIDE DE MEMBRANES SOLIDES CÉRAMIQUES CONDUISANT LES IONS

Publication
EP 2142277 A4 20120104 (EN)

Application
EP 08727276 A 20080403

Priority
• US 2008004376 W 20080403
• US 90973507 P 20070403

Abstract (en)
[origin: US2008245671A1] A method is provided to recycle and synthesize aqueous alkali chemicals from industrial and radioactively contaminated alkali salt based waste streams using a two-compartment electrolytic cell having an alkali cation-conductive ceramic membrane. The processes and apparatus provide the capability of recycling and synthesizing value added chemicals, including but not limited to, alkali hydroxides.

IPC 8 full level
B01D 39/20 (2006.01); **C02F 1/46** (2006.01); **C02F 1/461** (2006.01); **C25B 1/16** (2006.01); **C25B 13/04** (2006.01); **G21C 19/46** (2006.01); **G21F 9/06** (2006.01)

CPC (source: EP US)
C01B 25/37 (2013.01 - EP US); **C02F 1/46104** (2013.01 - EP US); **C02F 1/46109** (2013.01 - EP US); **C04B 35/16** (2013.01 - EP US); **C04B 35/447** (2013.01 - EP US); **C04B 35/462** (2013.01 - EP US); **C04B 35/481** (2013.01 - EP US); **C25B 1/16** (2013.01 - EP US); **C25B 13/04** (2013.01 - EP US); **G21C 19/46** (2013.01 - EP US); **G21F 9/06** (2013.01 - EP US); **C02F 2001/46128** (2013.01 - EP US); **C02F 2101/006** (2013.01 - EP US); **C02F 2201/46115** (2013.01 - EP US); **C02F 2201/4618** (2013.01 - EP US); **C04B 2235/3201** (2013.01 - EP US); **C04B 2235/3224** (2013.01 - EP US); **C04B 2235/3225** (2013.01 - EP US); **C04B 2235/3232** (2013.01 - EP US); **C04B 2235/3244** (2013.01 - EP US); **C04B 2235/3287** (2013.01 - EP US); **C04B 2235/3291** (2013.01 - EP US); **C04B 2235/3293** (2013.01 - EP US); **C04B 2235/447** (2013.01 - EP US); **Y02E 30/30** (2013.01 - EP); **Y02W 30/50** (2015.05 - EP US)

Citation (search report)
• [XY] US 5290405 A 19940301 - JOSHI ASHOK V [US], et al
• [Y] US 2006226022 A1 20061012 - BALAGOPAL SHEKAR [US], et al
• See references of WO 2008124047A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
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DOCDB simple family (application)
US 6245808 A 20080403; AU 2008236722 A 20080403; EP 08727276 A 20080403; JP 2010502135 A 20080403; US 2008004376 W 20080403