

Title (en)  
ELECTROLYTIC CELL INCLUDING A THREE-PHASE INTERFACE TO REACT CARBON-BASED GASES IN AN AQUEOUS ELECTROLYTE

Title (de)  
ELEKTROLYSEZELLE MIT EINER DREIPHASIGEN SCHNITTSTELLE ZUR REAKTION AUF KOHLENSTOFFBASIERTE GASE IN EINEM WÄSSRIGEN ELEKTROLYT

Title (fr)  
CELLULE ÉLECTROLYTIQUE COMPRENANT UNE INTERFACE TRIPHASÉE POUR FAIRE RÉAGIR DES GAZ À BASE DE CARBONE DANS UN ÉLECTROLYTE AQUEUX

Publication  
**EP 2823091 A4 20160420 (EN)**

Application  
**EP 13757822 A 20130301**

Priority

- US 201261606398 P 20120303
- US 201261608583 P 20120308
- US 201261639544 P 20120427
- US 201261713487 P 20121013
- US 2013028748 W 20130301

Abstract (en)  
[origin: US2013228470A1] A process for converts carbon-based gases such as non-polar organic gases and carbon oxides to longer chained organic gases such as liquid hydrocarbons, longer chained gaseous hydrocarbons, branched-chain liquid hydrocarbons, branched-chain gaseous hydrocarbons, as well as chained and branched-chain organic compounds. In general, the method is for chain modification of hydrocarbons and organic compounds, including chain lengthening, and eventual conversion into liquids including, but not limited to, hydrocarbons, alcohols, and other organic compounds.

IPC 8 full level  
**C25B 3/23** (2021.01); **C25B 3/25** (2021.01); **H01M 8/08** (2006.01)

CPC (source: EP US)  
**C25B 3/23** (2021.01 - EP US); **C25B 3/25** (2021.01 - EP US); **C25B 9/00** (2013.01 - EP US); **C25B 11/031** (2021.01 - EP US); **C25B 11/081** (2021.01 - EP US); **Y10T 156/10** (2015.01 - EP US)

Citation (search report)

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- [X] WO 2011150422 A1 20111201 - UNIV COLUMBIA [US], et al
- [X] US 4673473 A 19870616 - ANG PETER G P [US], et al
- [X] JUN YANO ET AL: "Selective ethylene formation by pulse-mode electrochemical reduction of carbon dioxide using copper and copper-oxide electrodes", JOURNAL OF SOLID STATE ELECTROCHEMISTRY ; CURRENT RESEARCH AND DEVELOPMENT IN SCIENCE AND TECHNOLOGY, SPRINGER, BERLIN, DE, vol. 11, no. 4, 29 July 2006 (2006-07-29), pages 554 - 557, XP019462203, ISSN: 1433-0768
- [X] KOTARO OGURA ET AL: "Direct conversion of methane to methanol, chloromethane and dichloromethane at room temperature", NATURE, vol. 319, 23 January 1986 (1986-01-23), pages 308, XP055157326
- See references of WO 2013134078A1

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CN109811364A

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

DOCDB simple family (publication)  
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**US 201313783102 A 20130301**; CA 2866306 A 20130301; CN 201380012374 A 20130301; EP 13757822 A 20130301; RU 2014139975 A 20130301; US 2013028748 W 20130301