

Title (en)

REDUCING CARBON DIOXIDE TO PRODUCTS

Title (de)

REDUZIERUNG DES KOHLENDIOXIDANTEILS IN PRODUKTEN

Title (fr)

RÉDUCTION DU DIOXYDE DE CARBONE EN PRODUITS

Publication

EP 2823090 A4 20151216 (EN)

Application

EP 13757264 A 20130306

Priority

- US 201261607240 P 20120306
- US 201261609088 P 20120309
- US 2013029425 W 20130306

Abstract (en)

[origin: WO2013134418A1] A method reducing carbon dioxide to one or more products may include steps (A) to (C). Step (A) may bubble said carbon dioxide into a solution of an electrolyte and a catalyst in a divided electrochemical cell. The divided electrochemical cell may include an anode in a first cell compartment and a cathode in a second cell compartment. The cathode may reduce said carbon dioxide into said products. Step (B) may adjust one or more of (a) a cathode material, (b) a surface morphology of said cathode, (c) said electrolyte, (d) a manner in which said carbon dioxide is bubbled, (e), a pH level of said solution, and (f) an electrical potential of said divided electrochemical cell, to vary at least one of (i) which of said products is produced and (ii) a faradaic yield of said products. Step (C) may separate said products from said solution.

IPC 8 full level

C25B 3/25 (2021.01); **C25B 9/19** (2021.01)

CPC (source: EP KR)

C25B 1/00 (2013.01 - EP); **C25B 1/55** (2021.01 - EP KR); **C25B 3/25** (2021.01 - EP KR); **C25B 9/19** (2021.01 - KR); **C25B 11/046** (2021.01 - KR); **C25B 15/083** (2021.01 - KR)

Citation (search report)

- [XII] US 2011114502 A1 20110519 - COLE EMILY BARTON [US], et al
- [X] US 2011114504 A1 20110519 - SIVASANKAR NARAYANAPPA [US], et al
- [XI] US 2010187123 A1 20100729 - BOCARSLY ANDREW B [US], et al
- See references of WO 2013134418A1

Designated contracting state (EPC)

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DOCDB simple family (application)

US 2013029425 W 20130306; AU 2013231005 A 20130306; CA 2864611 A 20130306; CN 201380011453 A 20130306; EP 13757264 A 20130306; JP 2014561087 A 20130306; KR 20147024882 A 20130306