

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 2598671 A4 20140625 (EN)**

Application  
**EP 11813101 A 20110727**

Priority  
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Abstract (en)  
[origin: US2011114502A1] A method for reducing carbon dioxide to one or more products is disclosed. The method may include steps (A) to (C). Step (A) may bubble the 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 generally reduces the carbon dioxide into the products. Step (B) may vary at least one of (i) which of the products is produced and (ii) a faradaic yield of the products by adjusting one or more of (a) a cathode material and (b) a surface morphology of the cathode. Step (C) may separate the products from the solution.

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**C25B 11/046** (2021.01 - KR)

Citation (search report)  
• [Y] DE 2301032 A1 19740725 - DECHEMA  
• [XP] WO 2010088524 A2 20100805 - UNIV PRINCETON [US], et al  
• [XPL] US 2011114502 A1 20110519 - COLE EMILY BARTON [US], et al  
• [XYI] SESHADRI G ET AL: "A new homogeneous electrocatalyst for the reduction of carbon dioxide to methanol at low overpotential", JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY, ELSEVIER, AMSTERDAM, NL, vol. 372, no. 1-2, 8 July 1994 (1994-07-08), pages 145 - 150, XP026577882, ISSN: 0022-0728, [retrieved on 19940708], DOI: 10.1016/0022-0728(94)03300-5  
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• [Y] MARIA JITARU: "ELECTROCHEMICAL CARBON DIOXIDE REDUCTION - FUNDAMENTAL AND APPLIED TOPICS (REVIEW)", JOURNAL OF THE UNIVERSITY OF CHEMICAL TECHNOLOGY AND METALLURGY, vol. 42, no. 4, 1 November 2007 (2007-11-01), pages 333 - 344, XP055116722, ISSN: 1311-7629  
• See references of WO 2012015905A1

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