

Title (en)
ELECTROCHEMICAL PROCESS FOR PRODUCTION OF GRAPHENE

Title (de)
ELEKTROCHEMISCHES VERFAHREN ZUR HERSTELLUNG VON GRAPHEN

Title (fr)
PROCÉDÉ ÉLECTROCHIMIQUE DE PRODUCTION DE GRAPHÈNE

Publication
EP 3004423 A1 20160413 (EN)

Application
EP 14732294 A 20140530

Priority
• GB 201309639 A 20130530
• GB 2014051662 W 20140530

Abstract (en)
[origin: WO2014191765A1] A process of producing graphene and / or graphite nanoplatelet structures by the electrochemical reduction of carbon oxide in an electrochemical cell is provided, wherein the cell includes (a) a negative electrode including a transition metal, transition metal-containing alloy, transition metal-containing oxide, transition metal containing ceramic, or a combination thereof; (b) a positive electrode; and (c) an electrolyte; wherein the process includes the step of passing a current between the electrodes in the presence of the carbon oxide.

IPC 8 full level
C25B 1/00 (2006.01)

CPC (source: EP US)
C25B 1/00 (2013.01 - EP US)

Citation (search report)
See references of WO 2014191765A1

Citation (examination)
• F. GOODRIDGE ET AL: "The electrolytic reduction of carbon dioxide and monoxide for the production of carboxylic acids", JOURNAL OF APPLIED ELECTROCHEMISTRY., vol. 14, no. 6, 1 November 1984 (1984-11-01), NL, pages 791 - 796, XP055257602, ISSN: 0021-891X, DOI: 10.1007/BF00615269
• J FISCHER ET AL: "The production of oxalic acid from CO₂", JOURNAL OF APPLIED ELECTROCHEMISTRY, 1 January 1981 (1981-01-01), pages 743 - 750, XP055257601, Retrieved from the Internet <URL:http://rd.springer.com/content/pdf/10.1007/BF00615179.pdf>

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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