Title (en)

ELECTROREDUCTION OF CARBON DIOXIDE ON TRANSITION METAL OXIDE CATALYSTS

Title (de)

ELEKTROREDUKTION VON KOHLENDIOXID AUF ÜBERGANGSMETALLOXIDKATALYSATOREN

Title (fr)

ÉLECTRORÉDUCTION DE DIOXYDE DE CARBONE SUR DES CATALYSEURS À BASE D'OXYDE DE MÉTAL DE TRANSITION

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2019197527A1] Provided is a method for the electrolytic reduction of CO2 that comprises providing an electrolytic cell comprising at least one reaction chamber comprising at least one anode and at least one cathode; placing at least one electrolyte solution between at least one anode and at least one cathode, wherein the at least one cathode comprises at least one catalyst surface comprising at least one transition metal oxide; providing CO2 in the electrolyte solution; and applying electrical potential to the electrolytic cell, so that CO2 undergoes at least one reduction reaction at the cathode to provide at least one product selected from the group consisting of methanol, methane, methanediol and formic acid. Also provided is an electrochemical device for electrochemical reduction of CO2 that has at least one cathode comprising a transition metal oxide.

IPC 8 full level

C25B 3/25 (2021.01)

CPC (source: EP US)

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