

Title (en)

REDUCTION METHOD AND ELECTROLYSIS SYSTEM FOR ELECTROCHEMICAL CARBON DIOXIDE UTILIZATION

Title (de)

REDUKTIONSVERFAHREN UND ELEKTROLYSESYSTEM ZUR ELEKTROCHEMISCHEN KOHLENSTOFFDIOXID-VERWERTUNG

Title (fr)

PROCÉDÉ DE RÉDUCTION ET SYSTÈME D'ÉLECTROLYSE PERMETTANT LE RECYCLAGE ÉLECTROCHIMIQUE DU DIOXYDE DE CARBONE

Publication

EP 3317435 A1 20180509 (DE)

Application

EP 16726551 A 20160531

Priority

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- EP 2016062253 W 20160531

Abstract (en)

[origin: WO2017005411A1] What are described are a reduction method and an electrolysis system for electrochemical carbon dioxide utilization. In this, carbon dioxide (CO₂) is conducted through a cathode space and contacted with a cathode, with which a reduction reaction of carbon dioxide (CO₂) to give at least one hydrocarbon compound or to give carbon monoxide (CO) can be catalysed. A common electrolyte is used, the electrolyte being conducted - from a first electrolyte reservoir (6) to the anode space (2), - from the anode space (2) to a second electrolyte reservoir (7), - from the second electrolyte reservoir (7) to the cathode space (3), from the cathode space (3) to the first electrolyte reservoir (6). A pressure-equalizing connection (13) directly connects the two electrolyte reservoirs (6, 7).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2017005411A1

Cited by

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DE 102015212503 A1 20170105; AU 2016290263 A1 20180104; AU 2016290263 B2 20180830; CN 107849713 A 20180327; CN 107849713 B 20190830; DK 3317435 T3 20190923; EP 3317435 A1 20180509; EP 3317435 B1 20190703; ES 2748807 T3 20200318; PL 3317435 T3 20200331; SA 518390682 B1 20210908; US 10760170 B2 20200901; US 2018179649 A1 20180628; WO 2017005411 A1 20170112

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