

Title (en)

ELECTROLYTIC SYSTEM AND REDUCTION METHOD FOR ELECTROCHEMICAL CARBON DIOXIDE UTILIZATION, ALKALI CARBONATE PREPARATION AND ALKALI HYDROGEN CARBONATE PREPARATION

Title (de)

ELEKTROLYSESYSTEM UND REDUKTIONSSVERFAHREN ZUR ELEKTROCHEMISCHEN KOHLENSTOFFDIOXID-VERWERTUNG, ALKALICARBONAT- UND ALKALIHYDROGENCARBONATERZEUGUNG

Title (fr)

SYSTÈME D'ÉLECTROLYSE ET PROCÉDÉ DE RÉDUCTION AUX FINS DE VALORISATION ÉLECTROCHIMIQUE DE DIOXYDE DE CARBONE, DE PRODUCTION DE CARBONATE ALCALIN ET D'HYDROGÉNOCARBONATE ALCALIN

Publication

EP 3292232 A1 20180314 (DE)

Application

EP 16733951 A 20160630

Priority

- DE 102015212504 A 20150703
- EP 2016065277 W 20160630

Abstract (en)

[origin: WO2017005594A1] Described is an electrolytic system comprising an electrolytic cell, a separation of the anolyte side and the catholyte side, and a separation and withdrawal device for an alkali carbonate and/or an alkali hydrogen carbonate. The disclosed reduction method allows for the continuous carbon dioxide utilization and simultaneous preparation of multiple valuable chemical products.

IPC 8 full level

C25B 3/25 (2021.01); **C01D 7/07** (2006.01); **C25B 1/14** (2006.01); **C25B 1/26** (2006.01); **C25B 15/08** (2006.01)

CPC (source: EP US)

C25B 1/00 (2013.01 - US); **C25B 1/14** (2013.01 - EP US); **C25B 1/23** (2021.01 - EP); **C25B 1/26** (2013.01 - EP US); **C25B 3/25** (2021.01 - US); **C25B 3/26** (2021.01 - EP); **C25B 15/08** (2013.01 - US); **C25B 15/083** (2021.01 - EP); **C25B 15/087** (2021.01 - EP)

Citation (search report)

See references of WO 2017005594A1

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)

DE 102015212504 A1 20170105; CN 107735512 A 20180223; CN 107735512 B 20200619; DK 3292232 T3 20211025; EP 3292232 A1 20180314; EP 3292232 B1 20210811; ES 2897748 T3 20220302; PL 3292232 T3 20220110; US 2018195184 A1 20180712; WO 2017005594 A1 20170112

DOCDB simple family (application)

DE 102015212504 A 20150703; CN 201680039523 A 20160630; DK 16733951 T 20160630; EP 16733951 A 20160630; EP 2016065277 W 20160630; ES 16733951 T 20160630; PL 16733951 T 20160630; US 201615739736 A 20160730