Title (en)

A TECHNIQUE FOR ACTIVATING SULFUR-BASED ELECTRODE FOR AN ELECTROLYSER

Title (de)

VERFAHREN ZUR AKTIVIERUNG EINER SCHWEFELBASIERTEN ELEKTRODE FÜR EINEN ELEKTROLYSATOR

Title (fr)

TECHNIQUE D'ACTIVATION D'ÉLECTRODE À BASE DE SOUFRE POUR UN ÉLECTROLYSEUR

Publication

EP 3400322 B1 20220608 (EN)

Application

EP 16707713 A 20160301

Priority

EP 2016054311 W 20160301

Abstract (en)

[origin: WO2017148507A1] A method and an arrangement for activating a Sulfur-based electrode for an electrolyser are provided. The Sulfur-based electrode includes sulfur and an electrically conductive non- sulfur material such as Nickel. In the method, an electrolyte and a complexing agent are provided to a container. The Sulfur-based electrode is positioned in the container. The electrolyte and the complexing agent are contacted with at least a part of a surface of the Sulfur-based electrode. The electrolyte reacts with the Sulfur-based electrode to release at least a part of the sulfur from the Sulfur-based electrode. The complexing agent reacts with the released sulfur to form a coordination complex with the released sulfur. The coordination complex is removed from the container. The coordination complex formed by the chemical reaction between the released sulfur and the complexing agent is in solid state, and thus is removed with ease from the electrolyte which is in liquid state.

IPC 8 full level

C25B 1/04 (2021.01); **C25B 9/00** (2021.01); **C25B 15/08** (2006.01)

CPC (source: EP IL)

C25B 1/04 (2013.01 - EP); **C25B 9/00** (2013.01 - EP IL); **C25B 15/08** (2013.01 - IL); **C25B 15/085** (2021.01 - EP)

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

DOCDB simple family (publication)

WO 2017148507 A1 20170908; DK 3400322 T3 20220801; EP 3400322 A1 20181114; EP 3400322 B1 20220608; IL 261145 A 20181031; IL 261145 B 20220601

DOCDB simple family (application)

EP 2016054311 W 20160301; DK 16707713 T 20160301; EP 16707713 A 20160301; IL 26114518 A 20180814