

Title (en)

OPERATING AN ELECTROLYSIS DEVICE

Title (de)

BETREIBEN EINER ELEKTROLYSEVORRICHTUNG

Title (fr)

FONCTIONNEMENT D'UN DISPOSITIF D'ÉLECTROLYSE

Publication

**EP 4200951 A1 20230628 (DE)**

Application

**EP 21762394 A 20210809**

Priority

- EP 20201333 A 20201012
- EP 2021072117 W 20210809

Abstract (en)

[origin: CA3198396A1] The invention relates to an electrolysis device (10) having at least one electrolytic cell (12) and an electrolysis energy source (14) connected to the at least one electrolytic cell (12). The invention also relates to a method for operating an electrolysis device (10), in which an electrical electrolysis current (48) is applied to at least one electrolytic cell (12) of the electrolysis device (10) during normal operation in order to perform electrolysis of a substance located in a reaction chamber of the electrolytic cell (12), and in which the electrical electrolysis current (48) is detected by means of a sensor unit (46). The aim of the invention is to improve the safety of an electrolysis device (10) or of an electrolytic cell (12) and to improve the operation thereof outside the normal electrolysis operation. According to the invention, a protective voltage (US) is applied to the at least one electrolytic cell (12) according to the detected electrical electrolysis current (48), which protective voltage is provided individually for the at least one electrolytic cell (12).

IPC 8 full level

**H02J 1/10** (2006.01); **C25B 15/08** (2006.01)

CPC (source: EP US)

**C25B 1/34** (2013.01 - US); **C25B 9/65** (2021.01 - US); **C25B 15/02** (2013.01 - EP); **C25B 15/023** (2021.01 - US); **C25B 15/06** (2013.01 - US); **H02J 1/106** (2020.01 - EP); **C25B 1/04** (2013.01 - EP); **C25B 1/23** (2021.01 - EP); **C25B 9/23** (2021.01 - EP); **Y02E 60/36** (2013.01 - EP)

Citation (search report)

See references of WO 2022078652A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 3982501 A1 20220413**; CA 3198396 A1 20220421; CN 116507758 A 20230728; EP 4200951 A1 20230628; US 2023374682 A1 20231123; WO 2022078652 A1 20220421

DOCDB simple family (application)

**EP 20201333 A 20201012**; CA 3198396 A 20210809; CN 202180076435 A 20210809; EP 2021072117 W 20210809; EP 21762394 A 20210809; US 202118030852 A 20210809