

Title (en)
HIGH-PRESSURE ELECTROLYSIS DEVICE

Title (de)
HOCHDRUCKELEKTROLYSEVORRICHTUNG

Title (fr)
DISPOSITIF D'ÉLECTROLYSE HAUTE PRESSION

Publication
EP 4013907 A1 20220622 (EN)

Application
EP 20768416 A 20200812

Priority
• NL 2023635 A 20190812
• NL 2020050509 W 20200812

Abstract (en)
[origin: WO2021029768A1] A high-pressure electrolysis unit for generating hydrogen and oxygen is provided comprising an assembly of tubes and pipes of electrically conductive metal, which constitutes either the anode or the cathode, with an arrangement of interconnected vertical and horizontal pipes and tubes, which are closed by welding or threaded fitting plugs, with the exception of the pipes for water inlet connection and hydrogen and oxygen outlet connections, wherein the internal face of the channel arrangement is coated with an electrically isolated coating, the counterelectrodes constituting the cathodes or anodes, respectively, being positioned in the vertical pipes enveloped by a cylindrical membrane and supported and connected by electrode support bars installed in horizontal pipes in the upper part of the housing.

IPC 8 full level
C25B 1/04 (2021.01); **C25B 9/05** (2021.01); **C25B 9/19** (2021.01); **C25B 9/70** (2021.01)

CPC (source: EP)
C25B 1/04 (2013.01); **C25B 9/015** (2021.01); **C25B 9/05** (2021.01); **C25B 9/19** (2021.01); **C25B 9/70** (2021.01); **Y02E 60/36** (2013.01)

Citation (search report)
See references of WO 2021029768A1

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)
WO 2021029768 A1 20210218; EP 4013907 A1 20220622; NL 2023635 B1 20210223

DOCDB simple family (application)
NL 2020050509 W 20200812; EP 20768416 A 20200812; NL 2023635 A 20190812