

Title (en)

SYSTEM FOR CARRYING OUT ELECTROLYSIS

Title (de)

ANLAGE ZUR DURCHFÜHRUNG EINER ELEKTROLYSE

Title (fr)

INSTALLATION POUR EFFECTUER UNE ÉLECTROLYSE

Publication

**EP 4363637 A1 20240508 (DE)**

Application

**EP 22737710 A 20220629**

Priority

- AT 505502021 A 20210701
- AT 2022060229 W 20220629

Abstract (en)

[origin: WO2023272326A1] The invention relates to a system for carrying out electrolysis to produce oxygen and hydrogen. Said system comprises at least two electrolysis devices (1), and these electrolysis devices (1) can be supplied with an electrolyte by a common electrolyte supply device (2). Furthermore, these electrolysis devices (1) each have an electrolyte inlet (3) and an electrolyte outlet (4), which electrolyte inlets (3) and electrolyte outlets (4) are coupled to the common electrolyte supply device (2) to provide an electrolyte stream through each of the electrolysis devices (1). The system also comprises at least one electronic control device (5) and at least one flow state detection device (6) to detect the flow states of the electrolyte stream through at least one of the electrolysis devices (1). The control device (5) is designed to control at least one actuator (7) to influence the electrolyte stream through at least one of the electrolysis devices (1) using detection values from the at least one flow state detection device (6). In this way a system is created, by means of which the process of electrolysis for producing oxygen and hydrogen can be carried out in an effective manner. At the same time the system is designed for a flexible design of the process of electrolysis with at the same time high efficiency and extended service life of the individual components of the system.

IPC 8 full level

**C25B 1/04** (2021.01); **C25B 9/19** (2021.01); **C25B 9/60** (2021.01); **C25B 9/70** (2021.01); **C25B 15/02** (2021.01); **C25B 15/021** (2021.01); **C25B 15/023** (2021.01); **C25B 15/027** (2021.01); **C25B 15/08** (2006.01)

CPC (source: AT EP US)

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