

Title (en)

METHOD FOR PRODUCING FLUORINE GAS AND DEVICE FOR PRODUCING FLUORINE GAS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON FLUORGAS UND VORRICHTUNG ZUR HERSTELLUNG VON FLUORGAS

Title (fr)

PROCÉDÉ DE PRODUCTION DE FLUOR GAZEUX ET DISPOSITIF DE PRODUCTION DE FLUOR GAZEUX

Publication

EP 4083261 A1 20221102 (EN)

Application

EP 20904542 A 20201211

Priority

- JP 2019238477 A 20191227
- JP 2020046388 W 20201211

Abstract (en)

Provided is a method for producing fluorine gas, capable of suppressing clogging of pipes and valves with mist. Fluorine gas is produced by a method including electrolyzing an electrolyte in an electrolytic cell, measuring an electric energy accumulated after the electrolyte is placed in the electrolytic cell, and the electrolyzing is started, and sending a fluid generated in the inside of the electrolytic cell in the electrolyzing the electrolyte, from the inside to the outside of the electrolytic cell through a flow path. In the sending, the flow path in which the fluid flows is switched in accordance with the electric energy measured in the measuring an electric energy, such that the fluid is sent to a first flow path that sends the fluid from the inside of the electrolytic cell to a first outside when the electric energy measured in the measuring an electric energy is not less than a predetermined reference value, or the fluid is sent to a second flow path that sends the fluid from the inside of the electrolytic cell to a second outside when the electric energy is less than the predetermined reference value. The predetermined reference value is 40 kAh or more relative to 1,000 L of the electrolyte.

IPC 8 full level

C25B 1/24 (2021.01); **C25B 9/00** (2021.01); **C25B 11/04** (2021.01)

CPC (source: CN EP KR US)

C25B 1/245 (2013.01 - CN EP KR US); **C25B 1/50** (2021.01 - CN); **C25B 9/17** (2021.01 - US); **C25B 9/19** (2021.01 - CN EP); **C25B 9/60** (2021.01 - KR); **C25B 11/043** (2021.01 - CN EP KR US); **C25B 15/023** (2021.01 - CN KR US); **C25B 15/033** (2021.01 - EP); **C25B 15/08** (2013.01 - EP KR US)

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)

US 2022235471 A1 20220728; CN 113950542 A 20220118; CN 113950542 B 20240305; EP 4083261 A1 20221102; EP 4083261 A4 20240911; JP WO2021131816 A1 20210701; KR 20220065832 A 20220520; TW 202138622 A 20211016; TW I753718 B 20220121; WO 2021131816 A1 20210701

DOCDB simple family (application)

US 202017615485 A 20201211; CN 202080039938 A 20201211; EP 20904542 A 20201211; JP 2020046388 W 20201211; JP 2021567254 A 20201211; KR 20227013003 A 20201211; TW 109145915 A 20201224