

Title (en)

STARTUP METHOD FOR ELECTROLYTIC SULFURIC ACID SOLUTION MANUFACTURING SYSTEM

Title (de)

STARTVERFAHREN FÜR SYSTEM ZUR HERSTELLUNG EINER ELEKTROLYTISCHEN SCHWEFELSÄURELÖSUNG

Title (fr)

PROCÉDÉ DE DÉMARRAGE POUR SYSTÈME DE FABRICATION DE SOLUTION ÉLECTROLYTIQUE D'ACIDE SULFURIQUE

Publication

**EP 4155434 A1 20230329 (EN)**

Application

**EP 20936154 A 20200915**

Priority

- JP 2020086988 A 20200518
- JP 2020034959 W 20200915

Abstract (en)

Hydrogen peroxide water and, if necessary, sulfuric acid and/or water, are added to a sulfuric acid solution present in a storage tank (2) or the like of an electrolytic sulfuric acid solution manufacturing system (1) to adjust the oxidizing power of the sulfuric acid solution to an enhanced state, and the sulfuric acid solution is supplied to an electrolytic cell 8 to perform electrolysis. Startup of the electrolytic sulfuric acid solution manufacturing system (1) takes place, for example, during an initial operation after completion of the electrolytic sulfuric acid solution manufacturing system (1), or after replacement of a sulfuric acid-containing solution in the system, or during an operation after the concentration of a persulfuric acid component in the electrolytic sulfuric acid solution stored in the system decreases due to shutdown of the system, or other similar situations. By starting up the electrolytic sulfuric acid solution manufacturing system in this manner, the startup of the system which manufactures an electrolytic sulfuric acid solution containing a persulfuric acid component generated by electrolyzing sulfuric acid can be completed in a short time, and the energy consumption can be reduced.

IPC 8 full level

**C25B 15/02** (2006.01); **C25B 1/30** (2006.01); **C25B 15/08** (2006.01)

CPC (source: EP US)

**C25B 1/22** (2013.01 - EP US); **C25B 1/29** (2021.01 - EP); **C25B 9/13** (2021.01 - US); **C25B 15/00** (2013.01 - EP);  
**C25B 15/021** (2021.01 - EP US); **C25B 15/027** (2021.01 - US); **C25B 15/087** (2021.01 - EP)

Citation (search report)

See references of WO 2021234978A1

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 4155434 A1 20230329**; CN 115298360 A 20221104; JP 2021181594 A 20211125; JP 7484407 B2 20240516; US 2023079765 A1 20230316;  
WO 2021234978 A1 20211125

DOCDB simple family (application)

**EP 20936154 A 20200915**; CN 202080098615 A 20200915; JP 2020034959 W 20200915; JP 2020086988 A 20200518;  
US 202017912910 A 20200915