Title (en)

ELECTROLYSIS APPARATUS FOR PRODUCING HALOGEN GASES

Title (de)

ELEKTROLYSEAPPARAT ZUR HERSTELLUNG VON HALOGENGASEN

Title (fr)

APPAREIL D'ELECTROLYSE POUR PRODUIRE DES GAZ HALOGENE

Publication

EP 1073780 A1 20010207 (DE)

Application

EP 99916899 A 19990331

Priority

- DE 19816334 A 19980411
- EP 9902200 W 19990331

Abstract (en)

[origin: DE19816334A1] The invention relates to an electrolysis apparatus for producing halogen gases from an aqueous alkali halogen solution, comprising several electrically connected plate-shaped electrolysis cells arranged in a pile and respectively provided with a housing consisting of two half shells made of an electro-conductive material and fitted with outer contact strips on at least one rear wall of said housing, also including two respective planar electrodes (anode and cathode), whereby the anode and cathode are provided with louver-like orifices so that the electrolytic feed material and products can flow though, said anode and cathode are separated from each other by means of a partition wall, are arranged parallel to each other and are electroconductively connected to the associated rear wall of the housing by means of metal reinforcements. The aim of the invention is to provide an apparatus which can operate at flow densities of more than 4 kA/m<2> with correspondingly higher production of gas in the boundary layer while maintaining a sustainable service life for the membrane and requiring few pulses. This is achieved by slanting the louver-like orifices (8B, 9B) of the anode (8) and cathode (9) towards the horizontal.

IPC 1-7

C25B 9/00

IPC 8 full level

C25B 9/19 (2021.01)

CPC (source: EP KR US)

C25B 9/70 (2021.01 - EP US); **C25B 9/75** (2021.01 - KR); **C25B 11/02** (2013.01 - EP KR US); **C25B 15/02** (2013.01 - KR)

Cited by

DE102005003527A1

Designated contracting state (EPC)

AT BE CH DE FR GB IE IT LI NL SE

DOCDB simple family (publication)

US 6503377 B1 20030107; AR 019037 A1 20011226; AT E213286 T1 20020215; AU 3522099 A 19991101; AU 742537 B2 20020103; BR 9909589 A 20001219; CA 2328150 A1 19991021; CA 2328150 C 20091208; CN 1142326 C 20040317; CN 1296530 A 20010523; DE 19816334 A1 19991014; DE 59900867 D1 20020321; EP 1073780 A1 20010207; EP 1073780 B1 20020213; JO 2116 B1 20000521; JP 2002511530 A 20020416; JP 4460770 B2 20100512; KR 100549653 B1 20060208; KR 20010042594 A 20010525; MA 24828 A1 19991231; NO 20005082 D0 20001009; NO 20005082 L 20001211; PL 343179 A1 20010730; RU 2215064 C2 20031027; TN SN99037 A1 20011231; TW 494144 B 20020711; WO 9953122 A1 19991021; ZA 992619 B 20001012

DOCDB simple family (application)

US 68945700 A 20001012; AR P990101620 A 19990409; AT 99916899 T 19990331; AU 3522099 A 19990331; BR 9909589 A 19990331; CA 2328150 A 19990331; CN 99804978 A 19990331; DE 19816334 A 19980411; DE 59900867 T 19990331; EP 9902200 W 19990331; EP 99916899 A 19990331; JO P19992116 A 19990306; JP 2000543664 A 19990331; KR 20007011268 A 20001010; MA 25523 A 19990405; NO 20005082 A 20001009; PL 34317999 A 19990331; RU 2000128031 A 19990331; TN SN99037 A 19990315; TW 88103745 A 19990311; ZA 992619 A 19990409