Title (en)

Process for manufacturing stable graphite cathodes for the electrolysis of chlorhydric acid

Title (de)

Verfahren zur Herstellung stabiler Graphitkathoden für die Salzsäureelektrolyse

Title (fr)

Procédé de fabrication de cathodes en graphite stables pour l'électrolyse d'acide chlorhydrique

Publication

**EP 0683247 B1 19970813 (DE)**

Application

**EP 95107029 A 19950509**

Priority

DE 4417744 A 19940520

Abstract (en)

[origin: EP0683247A1] A process is claimed for the prodn. of graphite cathodes for electrolysis, esp. HCl electrolysis, in which the pores are filled before use with a soln. of Ir or Rh salts or mixts. thereof with salts of Pt, Pd, Os and/or Ru in 2-4C mono- or polyhydric alcohol(s) (I), opt. flushed with (I), and then heated and cooled. The impregnated surface of the graphite is heated under downwardly-directed open gas flames to a temp. of 200-450 degrees C and a depth of up to 1 mm within 2-10 mins., with the flames lit only when the whole of the graphite body is under the burners. Also claimed is a process for the electrolytic decomposition of HCl in cells contg. graphite cathodes as above. Pref. (I) is 1,2-ethanediol or glycerol. After heating with gas flames, the impregnated graphite may be washed again with (I), heated again with gas flames as above and then cooled.

IPC 1-7

**C25B 11/14**; C25B 1/26; C25B 11/03

IPC 8 full level

**C25B 1/26** (2006.01); **C25B 11/03** (2006.01); **C25B 11/06** (2006.01); **C25B 11/14** (2006.01)

CPC (source: EP US)

**C25B 1/26** (2013.01 - EP US); **C25B 11/03** (2013.01 - EP US); **C25B 11/044** (2021.01 - EP US)

Cited by

RU2505625C2; DE102007044171A1; EP2037005A2

Designated contracting state (EPC)

BE DE FR GB IT

DOCDB simple family (publication)

**EP 0683247 A1 19951122**; **EP 0683247 B1 19970813**; CN 1052038 C 20000503; CN 1118020 A 19960306; DE 4417744 C1 19951123; DE 59500497 D1 19970918; US 5575985 A 19961119; ZA 954106 B 19960119

DOCDB simple family (application)

**EP 95107029 A 19950509**; CN 95105491 A 19950519; DE 4417744 A 19940520; DE 59500497 T 19950509; US 44003195 A 19950512; ZA 954106 A 19950519