

Title (en)

DEVICE FOR THE REGULATION OF THE HEAT FLOW OF AN ALUMINIUM FUSION ELECTROLYSIS CELL, AND METHOD OF OPERATING THIS CELL

Publication

EP 0047227 A3 19820414 (DE)

Application

EP 81810345 A 19810824

Priority

- CH 660180 A 19800902
- DE 3033710 A 19800908

Abstract (en)

[origin: EP0047227A2] The comparatively high supply of electrical energy to an aluminium fusion electrolysis cell should overcome without damage an enforced interruption, for example due to a defect or a reduction during peak loadings due to private households. The cell insulation (13) between steel bath (12) and carbon lining (14) is reinforced by up to 50% and up to double the amount of alumina (32) is poured onto the electrolyte crust (30). End faces of heat exchanger tubes (34) built into the interior of the cell as dead-end projects through peripheral parts of the cell (10) and terminate a heat exchanger (38, 44) disposed outside the cell. For 70-80% of the normal value of the current level, the cell is in thermal equilibrium without heat being removed or supplied. At higher current levels, in particular at the normal value, heat is continuously removed. At lower values, the inter-polar distance is increased or heat is supplied from another energy source. <IMAGE>

IPC 1-7

C25C 3/08; **C25C 3/06**

IPC 8 full level

C25C 3/08 (2006.01); **C25C 3/20** (2006.01)

CPC (source: EP)

C25C 3/08 (2013.01); **C25C 3/085** (2013.01); **C25C 3/20** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT CH DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0047227 A2 19820310; **EP 0047227 A3 19820414**; AU 7429281 A 19820311; DE 3033710 A1 19820401; ZA 815980 B 19820929

DOCDB simple family (application)

EP 81810345 A 19810824; AU 7429281 A 19810818; DE 3033710 A 19800908; ZA 815980 A 19810828