

Title (en)  
Electrolysis vat.

Title (de)  
Elektrolysewanne.

Title (fr)  
Cuve d'électrolyse.

Publication  
**EP 0063547 A1 19821027 (DE)**

Application  
**EP 82810159 A 19820414**

Priority  
• CH 262681 A 19810422  
• DE 3116273 A 19810424

Abstract (en)  
[origin: DE3116273A1] An electrolysis cell which is used, in particular, for producing aluminium by molten-salt electrolysis comprises an outer steel tank (10), a thermally and electrically insulating layer and an inner lining (18) composed essentially of carbon and comprising iron cathode bars. At least the lower 80% of the base insulation, preferably at least the lower 90%, consists of a volcanic ash layer (12) which has been consolidated by mechanical means and the remaining base insulation is formed by a leakage barrier (14) which seals the volcanic ash from the bath components which penetrate the carbon lining (18). <IMAGE>

Abstract (de)  
Eine Elektrolysewanne, die insbesondere zur Herstellung von Aluminium durch Schmelzflusselektrolyse benutzt wird, besteht aus einer äusseren Stahlwanne (10) einer wärmedämmenden Isolationsschicht und einer im wesentlichen aus Kohlestoff bestehenden Innenauskleidung (18). Mindestens die unteren 80% der Bodeninsulation, vorzugsweise mindestens die unteren 90%, bestehen aus einer mit mechanischen Mitteln verfestigten Vulkanascheschicht (12), die restliche Bodeninsulation wird aus einer Leckbarriere (14) gebildet, welche die Vulkanasche gegen die Kohleauskleidung (18) durchdringende Badkomponenten abschirmt.

IPC 1-7  
**C25C 3/08**

IPC 8 full level  
**C25C 3/08** (2006.01)

CPC (source: EP US)  
**C25C 3/085** (2013.01 - EP US)

Citation (search report)  
• [A] FR 2338336 A1 19770812 - PECHINEY ALUMINIUM [FR]  
• [A] FR 2388901 A1 19781124 - UNION CARBIDE CORP [US]  
• [A] US 4160715 A 19790710 - KINOSZ DONALD L, et al  
• [A] US 3723286 A 19730327 - HUNT L, et al

Cited by  
EP0142459A1; CH657629A5; AU573604B2

Designated contracting state (EPC)  
AT CH DE FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0063547 A1 19821027; EP 0063547 B1 19850320**; AU 8286082 A 19821028; CA 1190516 A 19850716; CH 653711 A5 19860115; DE 3116273 A1 19821118; DE 3116273 C2 19830303; US 4430187 A 19840207; ZA 822643 B 19830330

DOCDB simple family (application)  
**EP 82810159 A 19820414**; AU 8286082 A 19820420; CA 401347 A 19820421; CH 262681 A 19810422; DE 3116273 A 19810424; US 36872382 A 19820415; ZA 822643 A 19820419