

Title (en)  
CELL FOR THE ELECTROLYTIC REFINING OF ALUMINIUM

Publication  
**EP 0136969 B1 19880601 (DE)**

Application  
**EP 84810343 A 19840713**

Priority  
CH 413183 A 19830727

Abstract (en)  
[origin: US4601804A] The thermally insulated cell comprises: a trough with a steel shell which is surrounded by an outer wall, is lined with a material which is resistant to electrolyte and high temperatures, and is closed by a lid; an electrolyte based on alkali chlorides; segregation wells for the addition of aluminum which is to be purified and for the precipitation of impurity crystals; a supply means which is used to feed-in electrolyte material and is also conceived as a waste gas extractor; a collection and run-off system for the high purity aluminum. Provided in the interior of the cell are bipolar electrode units which are connected electrically in series and are arranged immersed in the electrolyte parallel to the end electrodes. The electrode units comprise graphite frames closed and sealed off by a diaphragm plate, which can be wet by the electrolyte but not by the aluminum. The inter-polar distance between the inner side of the diaphragm plate and the cathodic graphite frame is preferably 10-25 mm.

IPC 1-7  
**C25C 3/24**

IPC 8 full level  
**C25C 3/08** (2006.01); **C25C 3/24** (2006.01)

CPC (source: EP US)  
**C25C 3/24** (2013.01 - EP US)

Designated contracting state (EPC)  
CH DE LI

DOCDB simple family (publication)  
**EP 0136969 A1 19850410; EP 0136969 B1 19880601**; AU 3084384 A 19850131; AU 571246 B2 19880414; CA 1232867 A 19880216; CH 655136 A5 19860327; DE 3471696 D1 19880707; JP S6052588 A 19850325; NO 163291 B 19900122; NO 163291 C 19900502; NO 843001 L 19850128; US 4601804 A 19860722

DOCDB simple family (application)  
**EP 84810343 A 19840713**; AU 3084384 A 19840719; CA 459637 A 19840725; CH 413183 A 19830727; DE 3471696 T 19840713; JP 15708984 A 19840727; NO 843001 A 19840724; US 63028984 A 19840712