

Title (en)  
PROCESS AND APPARATUS FOR THE ELECTROLYTIC PREPARATION OF METAL, ESPECIALLY LEAD, AND SEMI-PRODUCT OBTAINED BY THEIR USE

Publication  
**EP 0094308 A3 19840523 (FR)**

Application  
**EP 83400915 A 19830505**

Priority  
FR 8207940 A 19820506

Abstract (en)  
[origin: ES8402626A1] The present invention is a process for preparing a lead or copper metal by electrolysis in a cell having a cathode and an anode which are separated by a diaphragm, which comprises the steps of preparing an electrolyte containing a metal chloride to be prepared in at least one chloride of an alkali metal or alkaline-earth metal circulating the electrolyte between the cathode and the anode parallel to the surface of the cathode, wherein the surface of the cathode is arranged in substantially a vertical direction and has a sufficiently low density of sites of nucleation so that the metallic particles which are formed from the sites keep their individuality in relation to the adjacent particles, until the particles reach a dimension of at least about 100 micrometers maintaining the flow of the electrolyte along the length of the surface of the cathode in a laminary or weakly turbulent manner so that, under the action of their weight and of the forces exercised by the current of the electrolyte, the metallic particles are detached and fall into the electrolyte and removing the metallic particles grouped at the bottom of the cell. The present invention also relates to an apparatus utilized in the process of preparing a lead or copper metal.

IPC 1-7  
**C25C 5/02; C25C 1/18**

IPC 8 full level  
**C25C 3/00** (2006.01); **C25C 1/18** (2006.01); **C25C 3/34** (2006.01); **C25C 5/02** (2006.01)

CPC (source: EP US)  
**C25C 1/18** (2013.01 - EP US); **C25C 5/02** (2013.01 - EP US)

Citation (search report)  
• [YD] FR 2427401 A1 19791228 - GOETZELMANN IND ABWASSER [DE]  
• [Y] FR 2218396 A1 19740913 - ENVIROTECH CORP [US]  
• [Y] US 3419901 A 19681231 - NORDHLOM GEORGE F  
• [Y] US 4181588 A 19800101 - HAVER FRANK P [US], et al  
• [A] DE 1900055 A1 19700820 - GOLDSCHMIDT AG TH  
• [AD] FR 2386349 A1 19781103 - DUVAL CORP [US]

Cited by  
CN102560559A

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

DOCDB simple family (publication)  
**EP 0094308 A2 19831116; EP 0094308 A3 19840523; EP 0094308 B1 19880727**; AT E36013 T1 19880815; AU 1427283 A 19831110; AU 572455 B2 19880512; BR 8302379 A 19840110; CA 1234070 A 19880315; DE 3377507 D1 19880901; DK 201183 A 19831107; DK 201183 D0 19830505; ES 522128 A0 19840201; ES 8402626 A1 19840201; FI 74306 B 19870930; FI 74306 C 19880111; FI 831530 A0 19830504; FI 831530 L 19831107; FR 2526446 A1 19831110; FR 2526446 B1 19860221; GR 78859 B 19841002; JP S5931879 A 19840221; MX 158327 A 19890125; NO 165033 B 19900903; NO 165033 C 19901212; NO 831606 L 19831107; PL 241834 A1 19840618; PT 76645 A 19830601; PT 76645 B 19860226; US 4507182 A 19850326; US 4601805 A 19860722; ZA 833237 B 19841031

DOCDB simple family (application)  
**EP 83400915 A 19830505**; AT 83400915 T 19830505; AU 1427283 A 19830505; BR 8302379 A 19830506; CA 427508 A 19830505; DE 3377507 T 19830505; DK 201183 A 19830505; ES 522128 A 19830505; FI 831530 A 19830504; FR 8207940 A 19820506; GR 830171305 A 19830504; JP 7920483 A 19830506; MX 19719683 A 19830506; NO 831606 A 19830505; PL 24183483 A 19830506; PT 7664583 A 19830505; US 49244383 A 19830506; US 67466884 A 19841126; ZA 833237 A 19830506