

Title (en)

CATHODE BAR COMPRISING A METAL SOLE FOR HALL-HEROULT ELECTROLYSIS TANKS

Publication

EP 0144371 B1 19870930 (FR)

Application

EP 84902015 A 19840514

Priority

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Abstract (en)

[origin: US4647356A] PCT No. PCT/FR84/00129 Sec. 371 Date Dec. 20, 1984 Sec. 102(e) Date Dec. 20, 1984 PCT Filed May 14, 1984 PCT Pub. No. WO84/04547 PCT Pub. Date Nov. 22, 1984. The invention relates to a cathode rod permitting extraction of the current from a cell for the production of aluminum by electrolysis according to the Hall-Heroult process, which is sealed in at least one groove which is open at the base of each of the carbonated blocks 1 forming the cathode of the electrolysis cell. According to the invention, the cathode rod 2 is extended by a metal sole 5 in electrical contact with the base of the carbonated blocks 1 over at least 20% of the total surface area of this base. The sole 5 is constituted by a metal sheet which is at least 4 mm thick and preferably at least 10 mm thick and is soldered to the cathode rod 2 before the carbonated block 1 is positioned in the cell. To prevent infiltration of electrolyte into the subcathode space, the lower face of the sole 5 is placed in a superimposed relationship and in electrical contact with a thick, continuous metal screen 26 arranged at the top of the thermally insulating lining.

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IPC 8 full level

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