

Title (en)

FLOATING CATHODIC ELEMENTS MADE OF ELECTRO CONDUCTIVE REFRACTORY MATERIAL FOR THE PRODUCTION OF ALUMINIUM BY ELECTROLYSIS

Publication

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Application

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Priority

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Abstract (en)

[origin: ES8402365A1] The invention concerns floating cathode elements which are intended for the electrolytic production of aluminum using the Hall-Heroult process in an electrolysis tank comprising a molten cryolite-base bath, between a carbon anode, and a cathodic layer of molten aluminum, said elements comprising at least one active cathode element (30) formed of electrically conductive refractory material such as titanium diboride and supported by an intermediate support (31) which is inert with respect to the liquid aluminum and the electrolyte, the mean relative density of the assembly of the active cathode element and the inert intermediate support being lower than the relative density of the liquid aluminum under the normal conditions of operation of the electrolysis tank. They may also and preferably be provided with anchoring and abutment means (32) for limiting the amplitude of movements thereof in a vertical direction, and guide means for limiting the amplitude of movements thereof in directions other than a vertical direction.

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