

Title (en)

ELECTROLYTIC CELL, IN PARTICULAR FOR PRODUCING ALUMINUM, HAVING A TUB-SHAPED CATHODE

Title (de)

ELEKTROLYSEZELLE, INSBESONDERE ZUR HERSTELLUNG VON ALUMINIUM, MIT EINER WANNENFÖRMIGEN KATHODE

Title (fr)

CELLULE ÉLECTROLYTIQUE, EN PARTICULIER POUR PRODUIRE DE L'ALUMINIUM, À CATHODE EN FORME DE CUVETTE

Publication

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Application

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Priority

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Abstract (en)

[origin: CA2854937A1] The invention relates to an electrolytic cell, which is suitable in particular for producing aluminum, comprises a cathode, a layer of liquid aluminum arranged on the top side of the cathode, a melt layer on top thereof, an anode above the melt layer, at least one and preferably at least two bus bars that contact the cathode from the bottom side of the cathode in a current-supplying manner, and at least one external current supply, wherein each of the at least one external current supply is connected in an electrically conductive manner to at least one respective and preferably at least two respective bus bars at a respective connection point, wherein the top side of the cathode is tub-shaped as viewed in the cross-section of the cathode, wherein the tube has two edge regions and a bottom region, which is arranged between the edge regions and lowered relative to the edge regions as viewed in the width direction of the cathode, wherein a respective side wall region is provided between each edge region and the bottom region, which side wall region connects the respective edge region and the bottom region, wherein i) the width of at least one of the bottom region and the edge regions varies over the length of the cathode, and/or ii) the height of the top side of the cathode determined from the bottom side of the cathode varies over the length of the cathode.

IPC 8 full level

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