

Title (en)

Regulating and stabilizing the AlF₃-content of aluminium electrolysis cells.

Title (de)

Regulierung und Stabilisierung des AlF₃-Gehaltes in einer Aluminiumelektrolysezelle.

Title (fr)

Régulation et stabilisation de la teneur en AlF₃ d'une cave d'électrolyse de l'aluminium.

Publication

EP 0455590 B1 19950628 (DE)

Application

EP 91810305 A 19910424

Priority

CH 152790 A 19900504

Abstract (en)

[origin: CA2041440A1] A method is used for regulating and stabilising an AlF₃ content (c), which is at least about 10% by weight, in the bath of an electrolysis cell for the production of aluminium from alumina dissolved in a cryolite melt. The individual state of an aluminium electrolysis cell, in particular of the cathodic carbon sump thereof, is analysed for a period (t₁) from a series of measured values, comprising a plurality of parameters. By means of a model calculation, the optimum time delay (ZV) between the addition of AlF₃ and its effect in the electrolyte is determined. The additions (z) of AlF₃ are calculated for a preset defined AlF₃ content (c) allowing for the time delay (ZV), and AlF₃ is added in portions or continuously.

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IPC 8 full level

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