

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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CPC (source: EP US)
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EP1344847A1; FR2774701A1; US6183620B1; WO9941432A1

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EP 0455590 A1 19911106; EP 0455590 B1 19950628; AU 643006 B2 19931104; AU 7601591 A 19911107; CA 2041440 A1 19911105; DE 59105830 D1 19950803; ES 2075401 T3 19951001; IS 1632 B 19960719; IS 3698 A7 19911105; NO 304748 B1 19990208; NO 911708 D0 19910430; NO 911708 L 19911105; US 5094728 A 19920310; ZA 913260 B 19920129

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