

Title (en)

METHOD AND SYSTEM FOR COOLING AN ELECTROLYTIC CELL FOR ALUMINIUM PRODUCTION

Title (de)

VERFAHREN UND SYSTEM ZUR KÜHLUNG EINER ELEKTROLYSEZELLE FÜR DIE HERSTELLUNG VON ALUMINIUM

Title (fr)

PROCEDE ET SYSTEME DE REFROIDISSEMENT D UNE CUVE D ELECTROLYSE POUR LA PRODUCTION D ALUMINIUM

Publication

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Application

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Abstract (en)

[origin: US2006118410A1] The invention relates to a cooling method of a igneous electrolytic cell for aluminium production wherein heat transfer fluid droplets (or "divided heat transfer fluid") are produced, preferentially in a confined volume in contact with a specified surface of at least one wall of the shell of the pot of the electrolytic cell, so as to induce the evaporation of all or part of said droplets by contact with said surface and remove the heat from said surface. The invention also relates to a cooling system capable of implementing the cooling method. The invention makes it possible to obtain a high cooling efficiency due to the latent heat of vaporisation of the heat transfer fluid.

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