

Title (en)

A DEVICE FOR COLLECTION OF HOT GAS FROM AN ELECTROLYSIS PROCESS, AND A METHOD FOR GAS COLLECTION WITH SAID DEVICE

Title (de)

VORRICHTUNG ZUR SAMMLUNG VON HEISSGAS AUS EINEM ELEKTROLYSEPROZESS SOWIE VERFAHREN ZUR GASSAMMLUNG MIT BESAGTER VORRICHTUNG

Title (fr)

DISPOSITIF DE CAPTATION DE GAZ CHAUD PROVENANT D'UN PROCESSUS D'ÉLECTROLYSE ET PROCÉDÉ DE CAPTATION DE GAZ AVEC LEDIT DISPOSITIF

Publication

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Application

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Abstract (en)

[origin: WO2010033037A1] An electrolysis cell producing metals needs to add an accurate amount of feed stock (like alumina) to the cell, and as an effect of the reaction taking place in the cell, one needs to extract the product (like aluminium) and remove any waste product (like HF and CO₂). In order to cool the cell properly and to ensure collection of all the effluents from the cell, which is not gas tight, a normal suction is about 100-150 times more ambient air than gas volume produced by the cell. The present invention relates to the principles of how one can extract a more CO₂-concentrated flue gas from the cell than is standard procedure in the aluminium industry today, by means of distributed pot suction (DPS) devices. In one embodiment the DPS can be integrated with a feeder having a breaker bar for feeding raw material to the cell. Heat energy can be extracted from the hot flue gas.

IPC 8 full level

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CPC (source: EP)

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Cited by

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