

Title (en)  
METHOD FOR PRODUCING ALUMINIUM BY METALLOTHERMIC REDUCTION OF TRICHLORIDE WITH MAGNESIUM AND APPARATUS FOR CARRYING OUT SAID METHOD

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON ALUMINIUM DURCH METALLOTHERMISCHE REDUKTION VON TRICHLORID MIT MAGNESIUM UND VORRICHTUNG ZUR AUSFÜHRUNG DIESES VERFAHRENS

Title (fr)  
PROCÉDÉ DE PRODUCTION D'ALUMINIUM PAR RÉDUCTION MÉTALLO-THERMIQUE DE TRICHLORURE DE MAGNÉSIUM, ET DISPOSITIF DE MISE EN UVRE

Publication  
**EP 2639320 A1 20130918 (EN)**

Application  
**EP 11839007 A 20110906**

Priority

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Abstract (en)  
A method is proposed for producing aluminium by metallothemic reduction of trichloride with magnesium in a stream of inert gas at a temperature of 900 - 1150°C, an overall pressure of 0.01 to 5 at and a mass ratio of aluminium chloride to magnesium in the starting mixture of 3.69 to 1.00. The process is carried out in a cylindrical reactor (1) with thin-walled ceramic packings (6) arranged on the inside and with a conical lower part (2), and a boiler-evaporator of the magnesium into the stream of inert gas is mounted upstream of the reactor, and an apparatus for separating liquid magnesium from the rest of the mixture thereof with aluminium chloride is mounted downstream of said reactor, wherein all of the components of the apparatus are lined inside with fireproof materials (5). The technical result is an increase in productivity by ensuring continuity of the reduction process, and excellent environmental characteristics.

IPC 8 full level  
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