

Title (en)

HIGH EFFICIENCY SYSTEM FOR MELTING MOLTEN ALUMINUM

Title (de)

HOCHEFFIZIENTES SYSTEM ZUM SCHMELZEN VON ALUMINIUM

Title (fr)

SYSTEME A HAUT RENDEMENT POUR CHAUFFER DE L'ALUMINIUM POUR LE METTRE EN FUSION

Publication

**EP 1219142 A4 20030212 (EN)**

Application

**EP 99974023 A 19990914**

Priority

- US 9921216 W 19990914
- US 32651899 A 19990604
- US 99519197 A 19971222

Abstract (en)

[origin: WO0120950A1] A method and system of heating a body of molten aluminum, for example, contained in a heating bay, the method comprising providing a body of molten aluminum (200); projecting an electric powered heater (10) into the body of molten aluminum (200) passing electric current through the element (14) and adding heat to the body of molten aluminum (200). The heater (10) is comprised of a sleeve (12) suitable for immersing in the molten aluminum. The sleeve (12) may have a closed end (32) and is comprised of a composed material comprised of an inner layer (30) of titanium or titanium alloy having an outside surface having a refractory coating (34) thereon exposed to the molten aluminum, the refractory coating (34) resistant to attack by the molten aluminum. An electric heating element (14) is located in the sleeve (12) in heat transfer relationship therewith for adding heat to the molten aluminum.

IPC 1-7

**H05B 3/06**; **H05B 3/40**; **G01K 1/12**

IPC 8 full level

**H05B 3/00** (2006.01); **H05B 3/02** (2006.01); **H05B 3/03** (2006.01); **H05B 3/48** (2006.01); **H05B 3/60** (2006.01)

CPC (source: EP US)

**H05B 3/0009** (2013.01 - EP US); **H05B 3/03** (2013.01 - EP); **H05B 3/48** (2013.01 - EP); **H05B 3/60** (2013.01 - EP)

Citation (search report)

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CN115291579A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0120950 A1 20010322**; EP 1219142 A1 20020703; EP 1219142 A4 20030212; EP 1219142 B1 20050406

DOCDB simple family (application)

**US 9921216 W 19990914**; EP 99974023 A 19990914