

Title (en)  
REMOVAL OF ALKALI METALS AND ALKALINE EARTH METALS FROM MOLTEN ALUMINIUM

Publication  
**EP 0108178 B1 19870722 (EN)**

Application  
**EP 82305965 A 19821109**

Priority  
EP 82305965 A 19821109

Abstract (en)  
[origin: EP0108178A1] For removing contaminant alkali- and alkaline earth metal contaminants, particularly Li, a particulate aluminium fluoride-containing material is introduced into a vortex established in a non-cylindrical body of molten aluminium contained in a vessel. The generation of the vortex establishes currents having both downward and lateral components at the bottom of the vortex and upwardly spiralling currents at the periphery of the vessel, which serve to recirculate suspended matter. The stirring of the molten metal is continued until the contaminant level is reduced to a desired level and then the molten Al is separated from the reaction products. The body of metal is contained in a vessel which is non-cylindrical and/or has its axis inclined to the vertical.

IPC 1-7  
**C22B 21/06**; **F27D 23/04**

IPC 8 full level  
**C22B 21/06** (2006.01); **F27D 27/00** (2010.01)

CPC (source: EP)  
**C22B 21/062** (2013.01); **F27D 27/00** (2013.01)

Citation (examination)  
• US 3620716 A 19711116 - HESS PAUL D  
• The Shorter Oxford English Dictionary (1973), page 480

Cited by  
WO9207967A1; EP0112024B1

Designated contracting state (EPC)  
CH DE FR GB LI

DOCDB simple family (publication)  
**EP 0108178 A1 19840516**; **EP 0108178 B1 19870722**; AU 2107783 A 19840517; AU 562966 B2 19870625; CA 1215237 A 19861216; DE 3276823 D1 19870827; ES 527104 A0 19850401; ES 8504267 A1 19850401; JP S59100231 A 19840609; NO 162028 B 19890717; NO 162028 C 19891025; NO 834081 L 19840510

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**EP 82305965 A 19821109**; AU 2107783 A 19831108; CA 440674 A 19831108; DE 3276823 T 19821109; ES 527104 A 19831108; JP 21069583 A 19831109; NO 834081 A 19831108