

Title (en)  
IMPROVED APPARATUS AND PROCESS FOR SEPARATING ALUMINIUM FROM A MIXTURE OF ALUMINIUM AND ALUMINIUM DROSS

Title (de)  
VERBESSERTE/S VORRICHTUNG UND VERFAHREN ZUM ABSCHIEDEN VON ALUMINIUM AUS EINER MISCHUNG VON ALUMINIUM UND ALUMINIUMKRÄTZE

Title (fr)  
PROCEDE ET APPAREIL AMELIORES PERMETTANT DE SEPARER L'ALUMINIUM D'UN MELANGE D'ALUMINIUM ET D'ECUME D'ALUMINIUM

Publication  
**EP 1135660 A1 20010926 (EN)**

Application  
**EP 99913010 A 19990408**

Priority  
• AU 9900260 W 19990408  
• AU PP726698 A 19981123

Abstract (en)  
[origin: WO0031482A1] An apparatus (14) for separating molten Aluminium from a mixture of molten aluminium and aluminium dross includes a table (16, 54) for supporting an insulated crucible (59, 75) containing the mixture of aluminium and aluminium dross. Electrical, mechanical or ultrasonic vibrators (70) or the like are provided to vibrate the table and crucible (59, 75). A frame (50, 52, 54) supports a rotatable paddle (18, 64), which can be lowered into the mixture in the crucible (59, 75) for stirring the mixture enabling simultaneous vibration of the crucible (59, 75) and stirring of the mixture. By virtue of that stirring and vibration, the aluminium droplets and particles of the dross coalesce to form larger droplets and gradually sink to the base of the crucible (59, 75). The aluminium can then be drained out into a bucket (20, 20a, 76). A screening means is disposed to substantially surround the crucible (59, 75) when it is supported by the table (16, 54). The screening means includes a door (72) to allow access to the crucible (59, 75) in one position and in a second position prevents access to the crucible (59, 75). A hood (80, 83) is provided at the top of the apparatus (14) so that the crucible (59, 75) is substantially fully enclosed. Gas burners (88, 90) may be used to retain heat in the crucible (59, 75) and contents.

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