

Title (en)
PROCESS FOR PRODUCING HIGH-PURITY ALUMINUM

Publication
EP 0099948 B1 19861120 (EN)

Application
EP 82303995 A 19820728

Priority
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Abstract (en)
[origin: EP0099948A1] To obtain a high-purity aluminum fraction from aluminum containing both eutectic impurities and peritectic impurities, the contents of these impurities in the original aluminum are reduced by melting the original aluminum to obtain molten aluminum (1), adding boron to the molten aluminum (1), and rotating a cooling body (3) as immersed in the boron-containing molten aluminum (1) while introducing a cooling fluid to the interior of the body (3) to crystallize high-purity aluminum on the surface of the body (3). The peritectic impurities react with the boron to form metallic borides which are centrifugally forced away from the cooling body (3) by the rotation of the latter without being incorporated into the aluminum crystallized on the surface of the body (3). The eutectic impurities are removed from the crystallized aluminum on the surface based on the principle of segregation.

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C22B 21/06

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CPC (source: EP)
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Cited by
EP0459303A1; DE10157722A1; KR20150027242A; DE10127753A1; US6156095A; EP1101830A1; FR2801060A1; EP0130016A3; US4604368A; EP1264903A3; US7442228B2; US7419530B2; US6454832B1; US7955414B2; US9676632B2; US10773963B2; WO2005049875A1; WO2014004392A1; US7648559B2; US8313554B2; US6293990B1; US7892318B2; US7531023B2; US7537639B2; TWI465577B

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