

Title (en)

Refining of aluminium casting alloys by boron addition

Title (de)

Reinigung von Aluminium-Gusslegierungen mittels Zugabe von Bor

Title (fr)

Affinage des alliages d'aluminium de fonderie par addition de bore

Publication

EP 1264903 B1 20060920 (DE)

Application

EP 02009964 A 20020503

Priority

- DE 10127753 A 20010607
- DE 10157722 A 20011124

Abstract (en)

[origin: EP1264903A2] Removing impurity alloying components from an aluminum cast alloy comprises completely melting the cast alloy; mixing with 0.005 weight % boron for the purpose of cleaning; casting the melt for a time sufficient for the boron to react with the impurity alloying components; and removing or retaining solids produced from the melt before or during casting. Preferred Features: Boron is added in the form of an aluminum-boron pre-alloy. Reaction time is at least one hour. The aluminum cast alloy is further treated for the purpose of grain refinement.

IPC 8 full level

C22B 21/06 (2006.01); **C22C 1/02** (2006.01); **C22C 1/03** (2006.01); **C22C 21/00** (2006.01)

CPC (source: EP)

C22B 21/06 (2013.01); **C22B 21/062** (2013.01); **C22C 1/026** (2013.01); **C22C 1/03** (2013.01)

Cited by

CN103572081A; DE102010060670A1

Designated contracting state (EPC)

DE ES FR GB IT SE

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EP 1264903 A2 20021211; **EP 1264903 A3 20030827**; **EP 1264903 B1 20060920**; DE 50208178 D1 20061102; ES 2271139 T3 20070416

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