

Title (en)

Process for the manufacture of homogenous alloys by melting and remelting

Title (de)

Verfahren zur Herstellung von homogenen Legierungen durch Einschmelzen und Umschmelzen

Title (fr)

Procédé pour la fabrication des alliages homogènes par fusion et refusion

Publication

EP 1006205 A3 20000614 (DE)

Application

EP 99122461 A 19991111

Priority

DE 19852747 A 19981116

Abstract (en)

[origin: US2003010472A1] In the case of a process for the production of homogeneous mixtures of alloys, in particular of intermetallic phases of at least two alloy components, by the melting of raw materials in an inductively heated cold wall furnace the following processing steps are applied: a) in a first processing step, the alloy components are melted into blocks with predetermined alloy composition according to the amount, and b) in a subsequent processing step, at least one of the blocks from the first processing step is melted down in an inductively heated cold wall furnace arrangement (60) where the melt is stirred by the electromagnetic field energy fed into the melt in such a manner that its alloy components are mixed thoroughly in such a manner that the melt (55) obtains a homogeneous material composition over its entire volume. Optionally, the first processing step can be carried out in an inductively heated cold wall furnace arrangement which is charged with chargeable raw materials, or the first processing step can be carried out by a vacuum arc remelting process in a cold wall furnace arrangement which is charged with preformed consumable electrodes.

IPC 1-7

C22C 1/02; **H05B 6/34**; **C22B 34/10**; **F27B 14/06**

IPC 8 full level

C22B 9/20 (2006.01); **C22B 34/10** (2006.01); **C22C 1/02** (2006.01); **F27B 14/06** (2006.01); **H05B 6/34** (2006.01)

CPC (source: EP US)

C22B 9/20 (2013.01 - EP US); **C22C 1/02** (2013.01 - EP US)

Citation (search report)

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