

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 B1 20020904 (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)

Cited by

EP3026133A1; US10196711B2

Designated contracting state (EPC)

AT DE ES FR GB IT

DOCDB simple family (publication)

**US 2003010472 A1 20030116**; AT E223509 T1 20020915; DE 19852747 A1 20000518; DE 59902539 D1 20021010; EP 1006205 A2 20000607; EP 1006205 A3 20000614; EP 1006205 B1 20020904; ES 2182447 T3 20030301; JP 2000144279 A 20000526

DOCDB simple family (application)

**US 17040602 A 20020614**; AT 99122461 T 19991111; DE 19852747 A 19981116; DE 59902539 T 19991111; EP 99122461 A 19991111; ES 99122461 T 19991111; JP 32563399 A 19991116