Title (en)

METHOD AND APPARATUS FOR PRODUCING AMORPHOUS ALLOY SHEET, AND AMORPHOUS ALLOY SHEET PRODUCED USING THE SAME

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINER PLATTE AUS EINER AMORPHEN LEGIERUNG SOWIE DAMIT HERGESTELLTE PLATTE AUS EINER AMORPHEN LEGIERUNG

Title (fr)

PROCEDE ET APPAREIL POUR PRODUIRE UN FILM D'ALLIAGE AMORPHE ET FILM D'ALLIAGE AMORPHE AINSI PRODUIT

Publication

EP 1545814 A1 20050629 (EN)

Application

EP 03798588 A 20030926

Priority

- KR 0301966 W 20030926
- KR 20020058764 A 20020927
- KR 20030058337 A 20030822

Abstract (en)

[origin: WO2004028724A1] The present invention provides a method for producing a bulk amorphous alloy sheet with high quality atlow production cost, by which an alloy melt can be directly transformed into a sheet form without using other additional processes. The method comprises preparing a melt containing alloy components; feeding themelt into a gap defined between two rolls, which rotate in opposite direction to each other, and each of which is provided with heat exchange means; and cooling the melt at a cooling rate higher than the critical cooling rate for transformation of the melt into an amorphous solid phase, when the melt passes through the gap defined between the two rolls. The present invention also provides an apparatus for producing a bulk amorphous alloy sheet with high quality at low production cost, and a bulk amorphous alloy sheet.

IPC 1-7

B22D 11/112

IPC 8 full level

B22D 11/06 (2006.01); **B22D 11/112** (2006.01)

CPC (source: EP KR US)

B22D 11/0622 (2013.01 - EP US); **B22D 11/0682** (2013.01 - EP US); **B22D 11/0697** (2013.01 - EP US); **B22D 11/112** (2013.01 - EP KR US); **C22C 45/001** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004028724 A1 20040408; EP 1545814 A1 20050629; EP 1545814 A4 20060524; EP 1545814 B1 20120912; HK 1083326 A1 20060630; JP 2006500219 A 20060105; KR 100528962 B1 20051115; KR 20040027464 A 20040401; US 2006102315 A1 20060518

DOCDB simple family (application)

KR 0301966 W 20030926; EP 03798588 A 20030926; HK 06104575 A 20060413; JP 2004539634 A 20030926; KR 20030067143 A 20030927; US 52929105 A 20050325