

Title (en)
METHOD FOR PRODUCING ALUMINUM ALLOY THICK PLATE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER DICKEN PLATTE AUS EINER ALUMINIUMLEGIERUNG

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PLAQUE ÉPAISSE D'ALLIAGE D'ALUMINIUM

Publication
EP 2130931 A1 20091209 (EN)

Application
EP 08722912 A 20080327

Priority

- JP 2008055873 W 20080327
- JP 2007095419 A 20070330
- JP 2007095423 A 20070330
- JP 2007098495 A 20070404

Abstract (en)
Disclosed is a method for manufacturing an aluminum alloy thick plate. The method includes, in the following order, a melting step (S1) for melting an aluminum alloy, the aluminum alloy containing a predetermined amount of Mg and further containing at least one of Si, Fe, Cu, Mn, Cr, Zn, Ti, and Zr, with the remainder being aluminum and inevitable impurities; a hydrogen gas removal step (S2) for removing hydrogen gas from the molten aluminum alloy; a filtration step (S3) for removing inclusions from the aluminum alloy from which hydrogen gas have been removed; a casting step (S4) for casting the aluminum alloy, from which inclusions have been removed, into a slab; a slicing step (S5) for slicing the slab into an aluminum alloy thick plate having a predetermined thickness; and a heat treatment step (S6) for subjecting the aluminum alloy thick plate having a predetermined thickness to a heat treatment by holding the same at a temperature of 400°C or higher but lower than its melting point for one hour or longer.

IPC 8 full level
B22D 21/00 (2006.01); **B22D 1/00** (2006.01); **B22D 21/04** (2006.01); **B22D 43/00** (2006.01); **C22B 9/02** (2006.01); **C22B 9/05** (2006.01); **C22B 21/06** (2006.01); **C22C 1/02** (2006.01); **C22C 21/00** (2006.01); **C22C 21/02** (2006.01); **C22C 21/06** (2006.01); **C22C 21/10** (2006.01); **C22F 1/00** (2006.01); **C22F 1/04** (2006.01); **C22F 1/047** (2006.01); **C22F 1/05** (2006.01); **C22F 1/053** (2006.01)

CPC (source: EP KR)
B22D 1/00 (2013.01 - EP KR); **B22D 21/007** (2013.01 - EP); **B22D 43/004** (2013.01 - EP); **C22B 9/02** (2013.01 - KR); **C22B 21/06** (2013.01 - EP KR); **C22B 21/066** (2013.01 - EP); **C22C 1/02** (2013.01 - EP); **C22C 21/02** (2013.01 - EP); **C22C 21/06** (2013.01 - EP); **C22F 1/04** (2013.01 - EP KR); **C22F 1/047** (2013.01 - EP); **C22F 1/05** (2013.01 - EP); **C22F 1/053** (2013.01 - EP)

Cited by
EP2263811A4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2130931 A1 20091209; **EP 2130931 A4 20110323**; **EP 2130931 B1 20190918**; **EP 2130931 B2 20220803**; KR 101151563 B1 20120530; KR 101197952 B1 20121105; KR 20090117951 A 20091116; KR 20110118186 A 20111028; TW 200900512 A 20090101; TW 201245462 A 20121116; TW I383053 B 20130121; TW I468527 B 20150111; WO 2008123355 A1 20081016

DOCDB simple family (application)
EP 08722912 A 20080327; JP 2008055873 W 20080327; KR 20097020395 A 20080327; KR 20117023623 A 20080327; TW 101129190 A 20080328; TW 97111205 A 20080328