

Title (en)
METHOD FOR PRODUCING MAGNESIUM BASE ALLOY FORMED ARTICLE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON FORMKÖRPERN AUS MAGNESIUMBASISLEGIERUNG

Title (fr)
PROCEDE DE PRODUCTION D'ARTICLE EN ALLIAGE DE MAGNESIUM

Publication
EP 1645651 A4 20070509 (EN)

Application
EP 04726905 A 20040412

Priority
• JP 2004005226 W 20040412
• JP 2003155476 A 20030530

Abstract (en)
[origin: EP1645651A1] The present invention provides a producing method of a magnesium-based alloy wrought product capable of producing a plastic processing wrought product made of magnesium-based alloy with excellent productivity. A drawn material made of magnesium-based alloy obtained by drawing processing is subjected to plastic processing into a wrought product at processing temperature of lower than 250°C. Since the alloy structure is finely divided by the drawing processing, plastic workability can be enhanced in the plastic processing even if the processing temperature is lower than 250°C. Examples of the plastic processing are forging processing, swaging processing and bending processing.

IPC 8 full level
B21J 5/00 (2006.01); **C22F 1/06** (2006.01); **B21J 1/02** (2006.01); **B21J 5/06** (2006.01); **C22C 23/02** (2006.01); **C22C 23/04** (2006.01); **C22F 1/00** (2006.01)

CPC (source: EP KR US)
B21J 1/02 (2013.01 - EP US); **B21J 5/00** (2013.01 - EP US); **C22C 23/02** (2013.01 - KR); **C22F 1/06** (2013.01 - EP KR US)

Citation (search report)
• [A] JP S63282232 A 19881118 - SHOWA DENKO KK
• [X] TAKAHASHI H ET AL: "TENSILE PROPERTIES AND BENDING FORMABILITY OF DRAWN MAGNESIUM ALLOY PIPES", MATERIALS SCIENCE FORUM, AEDERMANNSDORF, CH, vol. 419-422, 2003, pages 345 - 348, XP009044106, ISSN: 0255-5476
• [A] KOHZU, M. (OSAKA PREFECTURE UNIVERSITY (JAPAN)) ET AL: "Evaluation of press formability in magnesium alloy.", MATERIALS SCIENCE FORUM, VOL. 419-422, (PART 1), PP. 321-326, GRAPHS, PHOTOMICROGRAPHS, 7 REF. . SWITZERLAND CONFERENCE: PROCEEDINGS OF THE SECOND OSAKA INTERNATIONAL CONFERENCE ON PLATFORM SCIENCE AND TECHNOLOGY FOR ADVANCED MAGNESIUM ALLOYS 2003., 2003, XP009081487
• [A] KANEKO J ET AL: "Magnesium gokin tenshinzai no kikai-teki seishitsu to seikei-sei ni oyobosu shugo soshiki no eikyo /EFFECT OF TEXTURE ON THE MECHANICAL PROPERTIES AND FORMABILITY OF MAGNESIUM WROUGHT MATERIALS", NIPPON KINZOKU GAKKAISHI - JOURNAL OF THE JAPAN INSTITUTE OF METALS, NIPPON KINZOKU GAKKAI, TOKYO, JP, vol. 64, no. 2, 2000, pages 141 - 147, XP002975479, ISSN: 0021-4876
• See references of WO 2004106576A1

Cited by
CN103243282A; EP2373139A4

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1645651 A1 20060412; **EP 1645651 A4 20070509**; **EP 1645651 B1 20090701**; CN 100476012 C 20090408; CN 1798857 A 20060705; DE 602004021808 D1 20090813; JP 2004353067 A 20041216; JP 4332889 B2 20090916; KR 100727211 B1 20070613; KR 20060003908 A 20060111; TW 200500473 A 20050101; TW I279446 B 20070421; US 2007169858 A1 20070726; WO 2004106576 A1 20041209

DOCDB simple family (application)
EP 04726905 A 20040412; CN 200480015131 A 20040412; DE 602004021808 T 20040412; JP 2003155476 A 20030530; JP 2004005226 W 20040412; KR 20057022136 A 20051119; TW 93115213 A 20040528; US 55643404 A 20040412