

Title (en)
Casting component and method for its manufacture

Title (de)
Gussbauteil und Verfahren zu dessen Herstellung

Title (fr)
Pièce coulée et son procédé de fabrication

Publication
EP 2138593 A3 20101027 (DE)

Application
EP 09163549 A 20090624

Priority
DE 102008029864 A 20080624

Abstract (en)
[origin: EP2138593A2] Production of a cast component comprises using an aluminum diecasting alloy to cast the component, subjecting cast component to a heat treatment process, and carrying out annealing process at 120-260[deg] C for stability. The cast component is made of an aluminum diecasting alloy. The cast component has an elongation at break (As) of $\geq 10\%$ and a yield point (Rp 0.2) of less than 120 MPa. The heat-treated cast component has As of $\geq 7\%$ and Rp 0.2 of ≥ 110 MPa.

IPC 8 full level
C22C 21/02 (2006.01); **C22F 1/043** (2006.01)

CPC (source: EP US)
C22C 21/02 (2013.01 - EP US); **C22F 1/043** (2013.01 - EP US)

Citation (search report)

- [X] WO 2005071127 A1 20050804 - ALCOA INC [US]
- [X] WO 2005075692 A1 20050818 - ALCOA INC [US]
- [X] WO 03006698 A1 20030123 - PECHINEY ALUMINIUM [FR], et al
- [X] WO 2007051162 A2 20070503 - ALCOA INC [US], et al
- [X] US 2005220660 A1 20051006 - FUKUCHI FUMIAKI [JP], et al
- [X] WO 0123633 A2 20010405 - HONSEL GUSS GMBH [DE], et al
- [X] EP 0997550 A1 20000503 - ALUSUISSE LONZA SERVICES AG [CH]
- [X] SCHNEIDER W ET AL: "WAERMEBEHANDLUNG VON ALUMINIUM-GUSSLEGIERUNGEN FUER DAS VAKUUM-DRUCKGIESSEN", GIESSEREI, GIESSEREI VERLAG, DUSSELDORF, DE, vol. 84, no. 4, 24 February 1997 (1997-02-24), pages 17 - 22, XP000688088, ISSN: 0016-9765

Cited by
EP3825428A1; WO2021105229A1; WO2023099520A1

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 MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2138593 A2 20091230; EP 2138593 A3 20101027; CA 2669706 A1 20091224; DE 102008029864 A1 20100107; DE 102008029864 B4 20110224; JP 2010031360 A 20100212; US 2009314392 A1 20091224

DOCDB simple family (application)
EP 09163549 A 20090624; CA 2669706 A 20090623; DE 102008029864 A 20080624; JP 2009133141 A 20090602; US 48318709 A 20090611