

Title (en)
DIE CASTING COMPONENT AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
DRUCKGUSSBAUTEIL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
ELEMENT COULE SOUS PRESSION ET PROCEDE DE FABRICATION ASSOCIE

Publication
EP 1601806 A1 20051207 (DE)

Application
EP 04708310 A 20040205

Priority
• DE 2004000188 W 20040205
• DE 10310453 A 20030307

Abstract (en)
[origin: WO2004079029A1] The mechanical properties of a die casting component made of an aluminium alloy have the following proportions; magnesium 3.0 6.0 wt %, silicon 1.4 3.5 wt %, manganese 0.5 2.0 wt %, iron max. 0.15 wt %, titanium max. 0.2 wt %, the remainder being aluminium and other components having a total proportion of a maximum of 0.2 wt %. Said mechanical properties improve significantly by virtue of the fact that the die casting component is subjected to heat treatment in the form of thermal hardening at a temperature T of 180 DEG C = T = 320 DEG C over a period of at least thirty minutes after die casting.

IPC 1-7
C22F 1/047; **C22C 21/08**

IPC 8 full level
C22C 21/08 (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP US)
C22C 21/08 (2013.01 - EP US); **C22F 1/047** (2013.01 - EP US)

Citation (search report)
See references of WO 2004079029A1

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 2004079029 A1 20040916; DE 10310453 A1 20040923; EP 1601806 A1 20051207; US 2006278310 A1 20061214

DOCDB simple family (application)
DE 2004000188 W 20040205; DE 10310453 A 20030307; EP 04708310 A 20040205; US 54809005 A 20050906