

Title (en)

METHOD FOR PRODUCING A HIGH STRENGTH, HIGH TOUGHNESS Al-Zn ALLOY PRODUCT

Title (de)

HERSTELLUNGSVERFAHREN FÜR EIN HOCHFESTES, HOCHZÄHES Al-ZINNLEGIERUNGSPRODUKT

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ALLIAGE DE Al-ZN À HAUTE RÉSISTANCE ET DE GRANDE DURETÉ

Publication

EP 1831415 A1 20070912 (EN)

Application

EP 05802352 A 20051004

Priority

- EP 2005010809 W 20051004
- EP 04077721 A 20041005
- EP 05802352 A 20051004

Abstract (en)

[origin: WO2006037648A1] The invention relates to a Al-Zn alloy wrought product, and to a method of manufacturing such a product, with an improved combination of high toughness and high strength by maintaining good corrosion resistance, said alloy including (in weight percent): Zn 6.0--11.0, Cu 1.4-2.2, Mg 1.4-2.4, Zr 0.05-0.15, Ti < 0.05, Hf and/or V < 0.25, and optionally Sc and/or Ce 0.05-0.25, and Mn 0.05-0.12, other elements each less than 0.05 and less than 0.50 in total, balance aluminium, wherein such alloy has an essentially fully unrecrystallized microstructure at least at the position T/10 of the finished product.

IPC 8 full level

C22C 21/10 (2006.01); **C22F 1/053** (2006.01)

CPC (source: EP)

C22C 21/10 (2013.01); **C22F 1/053** (2013.01)

Citation (search report)

See references of WO 2006037648A1

Cited by

WO2015131992A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

FR 2876118 A1 20060407; **FR 2876118 B1 20100820**; AT E426050 T1 20090415; BR PI0517538 A 20081014; BR PI0517538 B1 20150616; CA 2592132 A1 20060413; CA 2592132 C 20140805; CN 101068943 A 20071107; CN 101068943 B 20111123; DE 102005045341 A1 20060720; DE 602005013429 D1 20090430; EP 1831415 A1 20070912; EP 1831415 B1 20090318; EP 1831415 B2 20141015; JP 2008516079 A 20080515; JP 5068654 B2 20121107; RU 2007116979 A 20081120; RU 2404276 C2 20101120; WO 2006037648 A1 20060413

DOCDB simple family (application)

FR 0509944 A 20050929; AT 05802352 T 20051004; BR PI0517538 A 20051004; CA 2592132 A 20051004; CN 200580033955 A 20051004; DE 102005045341 A 20050922; DE 602005013429 T 20051004; EP 05802352 A 20051004; EP 2005010809 W 20051004; JP 2007533966 A 20051004; RU 2007116979 A 20051004