

Title (en)  
HIGH-STRENGTH ALUMINUM ALLOY EXTRUDATE WITH EXCELLENT CORROSION RESISTANCE, DUCTILITY, AND HARDENABILITY AND PROCESS FOR PRODUCING SAME

Title (de)  
HOCHFESTES ALUMINIUMLEGIERUNGSEXTRUDAT MIT HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT, DUKTILITÄT UND HÄRTBARKEIT SOWIE VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
EXTRUDAT D'ALLIAGE D'ALUMINIUM À HAUTE RÉSISTANCE PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION, DUCTILITÉ, ET UNE TREMPABILITÉ ET SON PROCÉDÉ DE PRODUCTION

Publication  
**EP 2811043 A4 20151118 (EN)**

Application  
**EP 13742883 A 20130130**

Priority  
• JP 2012018486 A 20120131  
• JP 2013052002 W 20130130

Abstract (en)  
[origin: US2014166165A1] An Al—Mg—Si-based high-strength aluminum alloy extruded shape exhibits excellent corrosion resistance and ductility, and exhibits excellent hardenability during extrusion (i.e., ensures high productivity). A method for producing the same is also disclosed. The high-strength aluminum alloy extruded shape includes 0.65 to 0.90 mass % of Mg, 0.60 to 0.90 mass % of Si, 0.20 to 0.40 mass % of Cu, 0.20 to 0.40 mass % of Fe, 0.10 to 0.20 mass % of Mn, and 0.005 to 0.1 mass % of Ti, with the balance being Al and unavoidable impurities, the aluminum alloy extruded shape having a stoichiometric Mg<sub>2</sub>Si content of 1.0 to 1.3 mass %, an excess Si content relative to stoichiometric Mg<sub>2</sub>Si of 0.10 to 0.30 mass %, and a total content of Fe and Mn of 0.35 mass % or more.

IPC 8 full level  
**C22C 21/06** (2006.01); **B21C 29/00** (2006.01); **C22C 21/02** (2006.01); **C22F 1/00** (2006.01); **C22F 1/05** (2006.01)

CPC (source: EP US)  
**C22C 21/02** (2013.01 - EP US); **C22C 21/04** (2013.01 - US); **C22C 21/08** (2013.01 - EP US); **C22F 1/00** (2013.01 - EP US); **C22F 1/043** (2013.01 - EP US); **C22F 1/047** (2013.01 - EP US); **C22F 1/05** (2013.01 - EP US)

Citation (search report)  
• [A] JP 2011208251 A 20111020 - KOBE STEEL LTD  
• [A] EP 0222479 A1 19870520 - ALCAN INT LTD [CA]  
• See references of WO 2013115227A1

Cited by  
EP3737565A4; US11420249B2

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2014166165 A1 20140619**; CN 103781927 A 20140507; CN 103781927 B 20170208; EP 2811043 A1 20141210; EP 2811043 A4 20151118; EP 2811043 B1 20160727; JP 6000988 B2 20161005; JP WO2013115227 A1 20150511; WO 2013115227 A1 20130808

DOCDB simple family (application)  
**US 201314232720 A 20130130**; CN 201380002929 A 20130130; EP 13742883 A 20130130; JP 2013052002 W 20130130; JP 2013556434 A 20130130