

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
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Application
EP 13742883 A 20130130

Priority
• JP 2012018486 A 20120131
• JP 2013052002 W 20130130

Abstract (en)
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 2 Si content of 1.0 to 1.3 mass%, an excess Si content relative to stoichiometric Mg 2 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)
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EP3737565A4; US11420249B2

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