

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)
[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 Mg₂Si content of 1.0 to 1.3 mass %, an excess Si content relative to stoichiometric Mg₂Si 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
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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)
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