

Title (en)

ALUMINIUM ALLOY forged MATERIAL AND METHOD FOR manufacturING the SAME

Title (de)

GESCHMIEDETES ALUMINIUMLEGIERUNGSMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

MATÉRIAU D'ALLIAGE D'ALUMINIUM FORGÉ ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2811042 A1 20141210 (EN)

Application

EP 13744215 A 20130110

Priority

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- JP 2013050314 W 20130110

Abstract (en)

Provided is an aluminum alloy forged material comprising an excess amount of Si and a large quantity of a strength-increasing element such as Cu or Mn, and by which high strength and high toughness can be stably obtained even if the forged material is thinned, and also provided is a method for producing the same. A forged material constituted from an aluminum alloy which contains prescribed quantities of Mg, Si, Cu, Fe, Ti and B and further contains one or more elements selected from among Mn, Cr and Zr, with the remainder comprising Al and inevitable impurities, wherein the electrical conductivity measured at 20 °C on the surface of the aluminum alloy is greater than 42.5 % IACS but not more than 46.0 % IACS, and the forged aluminum alloy material has 0.2% proof stress of 360 MPa or more and Charpy impact value of 6 J/cm² or more.

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP2921567A4; EP3214191A1; EP4275812A1; WO2023218058A1; EP3464659B1; EP3464659B2

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Designated extension state (EPC)

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