

Title (en)
ALUMINIUM ALLOY FORGED MATERIAL

Title (de)
GESCHMIEDETES ALUMINIUMLEGIERUNGSMATERIAL

Title (fr)
MATÉRIAU D'ALLIAGE D'ALUMINIUM FORGÉ

Publication
EP 2811042 B1 20170621 (EN)

Application
EP 13744215 A 20130110

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Abstract (en)
[origin: EP2811042A1] 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
B22D 21/04 (2006.01); **C22C 21/02** (2006.01); **C22C 21/08** (2006.01); **C22F 1/00** (2006.01); **C22F 1/043** (2006.01); **C22F 1/05** (2006.01)

CPC (source: EP US)
B22D 21/04 (2013.01 - EP US); **C22C 21/02** (2013.01 - EP US); **C22C 21/08** (2013.01 - EP US); **C22F 1/00** (2013.01 - EP US); **C22F 1/043** (2013.01 - EP US); **C22F 1/05** (2013.01 - EP US)

Citation (opposition)
Opponent : Bharat Forge Aluminiumtechnik GmbH
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