

Title (en)

ANODIZED ALUMINUM ALLOY AND MANUFACTURING METHOD THEREOF

Title (de)

ANODISIERTE ALUMINIUMLEGIERUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ALLIAGE D'ALUMINIUM ANODISÉ ET PROCÉDÉ DE SON FABRICATION

Publication

**EP 1715084 B1 20190116 (EN)**

Application

**EP 04728648 A 20040421**

Priority

- JP 2004005677 W 20040421
- JP 2003391736 A 20031121

Abstract (en)

[origin: EP1715084A1] An aluminum alloy containing 5 to12% (mass%; similarly applicable hereinafter) of Si, 0.1 to 1% of Fe, less than 1% of Cu and 0.3 to 1.5% of Mg and having the valance formed of Al and impurities is cast by a continuous casting process. When the cast mass consequently obtained is homogenized, then extruded and/or forged and/or machined and subjected to an anodizing treatment, the resultant formed article is endowed with excellent wear resistance because the anodized coat formed thereon in a thickness of 30 µm or more with hardness Hv of 400 or more allows the presence therein of eutectic Si particles having particle diameters in the range of 0.4 to 5.5 µm.

IPC 8 full level

**C22C 21/02** (2006.01); **C22F 1/043** (2006.01); **C25D 11/04** (2006.01)

CPC (source: EP)

**C22C 21/02** (2013.01); **C22F 1/043** (2013.01); **C25D 11/04** (2013.01)

Cited by

EP2135735A1; DE102009012073B4; EP1972696A1; US2017121793A1; GB2485007A; DE102018216224A1; CN111690970A; EP2014780A1; EP3950985A4; DE102009012073A1; EP2811041A4; CN118241086A; WO2010007484A1; US8999080B2; US9828660B2; US8053088B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 1715084 A1 20061025; EP 1715084 A4 20070509; EP 1715084 B1 20190116;** WO 2005049896 A1 20050602

DOCDB simple family (application)

**EP 04728648 A 20040421;** JP 2004005677 W 20040421