

Title (en)

ALUMINUM ALLOY, BAR-SHAPED MATERIAL, FORGED MOLDING AND MACHINED MOLDING, AND, PRODUCED THEREFROM, WEAR-RESISTANT ALUMINUM ALLOY AND SLIDING PART EXCELLING IN ANODIC OXIDE COATING HARDNESS, AND PROCESS FOR PRODUCING THEM

Title (de)

ALUMINIUMLEGIERUNG, STABFÖRMIGES MATERIAL, GESCHMIEDETER FORMKÖRPER UND ZERSPANTER FORMKÖRPER UND DARAUS HERGESTELLTE VERSCHLEISSFESTE ALUMINIUMLEGIERUNG UND GLEITTEIL MIT HERVORAGENDER HÄRTE, EINER ANODISCHEN OXIDBESCHICHTUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ALLIAGE D'ALUMINIUM, MATERIAU EN FORME DE BARRE, OBJET MOULE FORGE ET OBJET MOULE USINE ET ALLIAGE D'ALUMINIUM FABRIQUE A PARTIR DE CES MATERIAUX ET RESISTANT A L'USURE AINSI QUE PARTIE COULISSANTE POSSEDANT D'EXCELLENTE PROPRIETES EN TERMES DE DURETE DE REVETEMENT D'OXYDES ANODIQUE ET PROCEDE DE F

Publication

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Application

EP 04728648 A 20040421

Priority

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Abstract (en)

[origin: EP1715084A1] An aluminum alloy containing 5 to 12% (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 valence 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

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CPC (source: EP)

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Citation (search report)

- [X] J.. DATTA: "ALUMINIUM-SCHLÜSSEL, KEY TO ALUMINIUM ALLOYS", 1997, ALUMINIUM-ZENTRALE, DÜSSELDORF, DE, XP002426401
- [A] W.HUFNAGEL: "ALUMINIUM-TASCHENBUCH", 1986, ALUMINIUM VERLAG, DÜSSELDORF, DE, XP002426402
- See references of WO 2005049896A1

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