

Title (en)
DIE CASTING ALUMINUM ALLOY, PRODUCTION METHOD OF DIE CASTING ALUMINUM ALLOY, AND COMMUNICATIONS PRODUCT

Title (de)
DRUCKGUSSALUMINIUMLEGIERUNG, HERSTELLUNGSVERFAHREN FÜR DIE DRUCKGUSSALUMINIUMLEGIERUNG UND KOMMUNIKATIONSPRODUKT

Title (fr)
ALLIAGE D'ALUMINIUM COULÉ SOUS PRESSION, PROCÉDÉ DE PRODUCTION D'UN ALLIAGE D'ALUMINIUM COULÉ SOUS PRESSION ET PRODUIT DE COMMUNICATIONS

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Abstract (en)
Embodiments of the present invention provide a die casting aluminum alloy, including constituents with the following mass percentages: silicon: 4.0% to 10.0%; magnesium: 0.2% to 1.0%; copper: $\leq 0.1\%$; manganese: $\leq 0.1\%$; zinc: $\leq 0.1\%$; ferrum: $\leq 1.3\%$; titanium: $\leq 0.2\%$; inevitable impurities: $\leq 0.15\%$; and the rest: aluminum. The die casting aluminum alloy has a high heat-conducting property, good formability, high corrosion resistance, and a good mechanical property. This can resolve a prior-art problem that forming and heat dissipation requirements of a communications product with a complex structure, high heat flux density, and large power cannot be met at the same time because it is difficult for a die casting aluminum alloy to have both a high heat-conducting property and good formability. The embodiments of the present invention further provide a production method of the die casting aluminum alloy and a communications product.

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Citation (search report)

- [XJ] EP 3138933 A1 20170308 - ASANUMA GIKEN CO LTD [JP]
- [XPAI] WO 2018095186 A1 20180531 - BYD CO LTD [CN]
- [XJ] JP 2010201497 A 20100916 - NISSAN MOTOR, et al

Cited by
CN109609790A; CN114737090A; CN113106303A

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