

Title (en)

GRAIN REFINEMENT OF COPPER ZINC SILICON CASTING ALLOYS WITH IRON AND BORON

Title (de)

KORNFEINUNG VON KUPFER-ZINK-SILICIUM-GUSSLEGIERUNGEN MIT EISEN UND BOR

Title (fr)

AFFINEMENT DE GRAINS D'ALLIAGES DE COULÉE CUIVRE/ZINC/SILICIUM À L'AIDE DE FER ET DE BORE

Publication

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Application

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Abstract (en)

[origin: WO2015010768A1] The invention relates to a copper alloy with the following composition [in % by weight]: Cu from 70.0 to 97.0%; Si from 2.0 to 4.5%; B from 0.002 to 0.03%; Fe from 0.01 to 1.0%; if desired also up to 2.0% of Sn, if desired also up to 0.4% of Ni, if desired also up to 0.2% of P, if desired also up to 0.25% of Pb, and if desired in each case also up to 0.15% of As or Sb, the remainder being Zn and unavoidable impurities. The ratio of boron content to the sum of iron content and nickel content here is at least 0.025 and at most 0.12. The invention further relates to the use of boron and iron and optionally also nickel as means for obtaining grain-refined copper-zinc-silicon alloys.

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

ERNST BRUNHUBER, 1 January 1959, SCHMELZ- UND LEGIERUNGSTECHNIK VON KUPFERWERKSTOFFEN, GIESSEREI-VERL, DE, PAGE(S) 74 - 79, XP009512503

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