

Title (en)
Lead-free, free-cutting copper alloys

Title (de)
Bleifreie Automatenkupferlegierung

Title (fr)
Alliage de cuivre de décolletage sans plomb

Publication
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Application
EP 05017190 A 19981116

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Abstract (en)
The present invention relates to lead free, free cutting copper alloys and methods of their manufacture. In particular, the present invention is directed to a lead-free, free-cutting copper alloy which comprises 70 to 80 percent, by weight, of copper; 1.8 to 3.5 percent, by weight, of silicon; and at least one element selected from among 0.3 to 3.5 percent, by weight, of tin, 1.0 to 3.5 percent, by weight, of aluminium, and 0.02 to 0.25 percent, by weight, of phosphorous; and the remaining percent, by weight, of zinc and wherein the metal structure of the free cutting copper alloy has at least one phase selected from the gamma (gamma) phase and the kappa (kappa) phase. <IMAGE>

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