

Title (en)

MATERIAL FOR ELECTRIC CONTACT COMPONENTS

Title (de)

WERKSTOFF FÜR ELEKTRISCHE KONTAKTBAUTEILE

Title (fr)

MATÉRIAUX POUR DES PIÈCES DE CONTACT ÉLECTRIQUES

Publication

EP 2906733 B1 20160824 (DE)

Application

EP 12780079 A 20121010

Priority

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Abstract (en)

[origin: WO2014056466A1] The invention relates to a material for a metal strip for manufacturing electric contact components and to the use of such a material for electric contact components, in particular plug contacts. Said material consists of a copper alloy which can be hardened and which comprises the following alloy components in weight percentages: zinc (Zn) 19.0% to 40.0%; tin (Sn) 0.1% to 1.5%; nickel (Ni) 0.8% to 3.0%; silicon (Si) 0.1% to 0.9%; and optionally at least one element of the following group: phosphorus (P), boron (B), silver (Ag), manganese (Mn), chromium (Cr), aluminum (Al), magnesium (Mg), iron (Fe), zirconium (Zr), or arsenic (As), wherein the percentage of each individual element of the group is maximally 0.8% and the percentage of all the elements of the group is maximally 4.55%; residual copper (Cu); and impurities resulting from the melting process. The percentage of nickel (Ni) can be at least partly replaced by cobalt (Co), and the ratio of nickel (Ni) and/or cobalt (Co) to silicon (Si) ranges from 3.5 : 1 to 7.5 : 1.

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