

Title (en)
METHOD FOR THE MANUFACTURE OF SINTERED CONTACT MATERIAL

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Application
EP 85106749 A 19850531

Priority
DE 3421758 A 19840612

Abstract (en)
[origin: US4764227A] Contact materials based on AgSnO₂ and having Bi₂O₃ and CuO as further metal oxide additives were previously disclosed. In these materials the total content of all metal oxides was supposed to be between 10 and 25% by volume with the SnO₂ share equal to or greater than 70% by volume of the total amount of oxide. According to this invention the quantity of SnO₂ is kept smaller than 70% by volume; specifically at about 65%, but in any case equal to or greater than 50%. The SnO₂ weight content is to be in the 4% to 8% range and the weight percentage ratio of SnO₂ to CuO is to be between 8:1 and 12:1. In the associated production process, either Bi₂O₃ powder is purposely admixed to an internally oxidized alloy powder (IOAP) in an additional operation, a grain restructuring with locally different Bi₂O₃ concentrations occurring in the structure after sintering and compacting. Alternatively, higher bismuth percentages in the alloy powder can be worked with directly, which is again internally oxidized to an IOAP. From these starting materials two-layer sintered contact elements with a solderable silver layer can be efficiently produced.

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H01H 1/02

IPC 8 full level
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DE 2754335 A1 19780608 - MATSUSHITA ELECTRIC IND CO LTD

Cited by
EP0369282A3; EP0369283A3; US5486222A; DE4331913A1; US5628448A; WO9315517A1

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