

Title (en)

Silver-iron material for electrical switch contacts and process for its preparation

Title (de)

Gesinterter Silber-Eisen-Werkstoff für elektrische Kontakte und Verfahren zu seiner Herstellung

Title (fr)

Matière argent-fer pour contacts interrupteurs électriques et procédé pour sa fabrication

Publication

EP 0795367 A1 19970917 (DE)

Application

EP 97101342 A 19970129

Priority

DE 19607183 A 19960227

Abstract (en)

[origin: DE19607183C1] A sintered Ag-Fe material consists of (in wt.%): 0.5-20 Fe; 0-5 Zn, Cu, Mn, Re, Ir, Ru and/or oxides of W, Mo, Zn, Al, In, Si, Zr; balance Ag with the Fe contg. >0.25% C. The amt. of carbon in the Fe is pref. >0.4, esp. 0.6-1.2%. The material is made by mixing together the starting powders in the amts. prescribed, cold isostatic pressing, sintering at 650-940 deg C and then extruding. The sintering is carried out in a hydrogen-free protective atmosphere.

Abstract (de)

Gesinterter Silber-Eisenwerkstoffe für elektrisch Kontakte, die in ihren Eigenschaften mit Silber-Nickel-Werkstoffen vergleichbar sind, erhält man, wenn man Eisenpulver mit mehr als 0,25 Gew.% Kohlenstoff und Mikrohärtungen von mehr als 200 HV 0,025 einsetzt und das Sintern in einer wasserstofffreien Schutzgasatmosphäre durchführt.

IPC 1-7

B22F 1/00; **H01H 1/02**; **C22C 1/04**

IPC 8 full level

B22F 1/00 (2006.01); **B22F 1/12** (2022.01); **B22F 3/12** (2006.01); **C22C 1/04** (2006.01); **C22C 1/05** (2006.01); **C22C 5/06** (2006.01); **C22C 32/00** (2006.01); **H01H 1/02** (2006.01); **H01H 1/023** (2006.01); **H01H 1/0237** (2006.01); **H01H 1/027** (2006.01); **H01H 11/04** (2006.01)

CPC (source: EP US)

B22F 1/09 (2022.01 - EP US); **B22F 1/12** (2022.01 - EP US); **C22C 1/0466** (2013.01 - EP US); **C22C 5/06** (2013.01 - EP US); **C22C 32/0084** (2013.01 - EP US); **H01H 1/023** (2013.01 - EP US); **H01H 1/0237** (2013.01 - EP US); **H01H 1/027** (2013.01 - EP US); **H01H 11/048** (2013.01 - EP US); **Y10S 428/929** (2013.01 - EP US); **Y10T 428/1216** (2015.01 - EP US); **Y10T 428/12167** (2015.01 - EP US); **Y10T 428/12896** (2015.01 - EP US); **Y10T 428/2813** (2015.01 - EP US)

Citation (search report)

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DOCDB simple family (application)

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