

Title (en)

Shaped body formed of copper-beryllium alloy and method of manufacturing same.

Title (de)

Geformter Körper, gebildet aus Kupfer-Beryllium-Legierung und Verfahren zu seiner Herstellung.

Title (fr)

Pièce profilée faite d'un alliage de cuivre-béryllium et procédé de fabrication.

Publication

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Application

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Priority

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Abstract (en)

In manufacturing shaped parts of various products, such as relays and connectors, of Cu-Be alloy material, the aim is improved formability to withstand severe working conditions. Known processes include a solution treatment of a rolled sheet of Cu-Be alloy material followed by a cold rolling with a relatively low reduction; this suffers from degradation of the formability of the material. Also, mill-hardened Cu-Be alloy material subjected to an age hardening is disadvantageous in that desired formability of the alloy cannot be achieved without sacrifice of strength. The invention enables the recovery of the formability of the material by subjecting a rolled sheet of the Cu-Be alloy containing 0.2-0.8 wt% Be and 0.3-4.0 wt% Ni and/or Co to a solution treatment and cold rolling of 20% reduction or more, followed by annealing at 250-550 DEG C. A high post aging strength of the material shaped into the desired configuration is then achieved by subjecting the shaped material to aging at 350-500 DEG C.

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C22F 1/08

IPC 8 full level

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C22F 1/08 (2013.01)

Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN, vol. 6, no. 49 (C-96)[927], 31st March 1982; & JP-A-56 163 248 (NIPPON GAISHI K.K.) 15-12-1981

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