

Title (en)
METHOD FOR OBTAINING A COMPONENT MADE OF A PALLADIUM-INDIUM ALLOY HAVING A GOOD WORKABILITY

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER KOMPONENTE AUS EINER PALLADIUM-INDIUM-LEGIERUNG MIT GUTER VERARBEITBARKEIT

Title (fr)
PROCÉDÉ D'OBTENTION D'UN COMPOSANT EN ALLIAGE PALLADIUM-INDIUM AYANT UNE BONNE APTITUDE AU FAÇONNAGE

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Application
EP 23175195 A 20230524

Priority
CH 682023 A 20230127

Abstract (en)
The present disclosure concerns a method for obtaining a component made of a palladium (Pd)-indium (In) alloy comprising between 46 and 56 wt% Pd, between 44 and 54 wt% In, between 0 and 10 wt% of silver (Ag), gold (Au), platinum (Pt) or tin (Sn), or a combination of these elements, between 0 and 2 wt% of a grain refiner, between 0 and 5 wt% of aluminum (Al), and a maximum of 1.5 wt% of other elements. The method comprises the steps of providing the Pd-In alloy, and thermomechanical processing the Pd-In alloy at a heating temperature corresponding to a value between 0.6 and 0.9 of the homologous temperature (T_m) of the Pd-In alloy. The thermomechanically processed Pd-In alloy has a bending stress measured with a three-point bending test, according to DIN EN ISO 9693 until breakage that is at least two time greater than the bending stress of as-cast the Pd-In alloy measured with the same three-point bending test.

IPC 8 full level
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Citation (search report)

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