

Title (en)
MOLYBDENUM SINTERED PART AND METHOD OF MANUFACTURING

Title (de)
MOLYBDÄN-SINTERTEIL UND HERSTELLUNGSVERFAHREN

Title (fr)
PIÈCE FRITTÉE EN MOLYBDÈNE ET PROCÉDÉ DE FABRICATION

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Application
EP 18789316 A 20180907

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Abstract (en)
[origin: WO2019060932A1] The invention relates to a powder-metallurgical sintered molybdenum part, in the form of a solid body, which has the following composition: a molybdenum portion of $\geq 99.93\%$ by weight, a boron portion "B" of ≥ 3 ppmw and a carbon portion "C" of 3 ppmw, wherein the total portion "B+C" of carbon and boron is in the range of $15 \text{ ppmw} \leq \text{"B+C"} \leq 50 \text{ ppmw}$, an oxygen portion "O" in the range from $3 \text{ ppmw} \leq \text{"O"} \leq 20 \text{ ppmw}$, a maximum tungsten portion of $\leq 330 \text{ ppmw}$ and a maximum portion of other contaminants of $\leq 300 \text{ ppmw}$. The invention further relates to a powder-metallurgical method method for producing such a sintered moybdenum part.

IPC 8 full level
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CPC (source: AT EP US)
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C-Set (source: EP)
1. **B22F 2999/00 + B22F 5/00 + C22C 1/045 + B22F 2207/01**
2. **B22F 2999/00 + B22F 3/10 + B22F 2201/013**
3. **B22F 2998/10 + C22C 1/045 + B22F 3/04 + B22F 3/10**
4. **B22F 2999/00 + C22C 1/045 + B22F 3/02 + B22F 3/10**

Citation (examination)
TAKIDA TOMOHIRO ET AL: "Mechanical Properties of Fine-Grained, Sintered Molybdenum Alloys with Dispersed Particles Developed by Mechanical Alloying", MATERIALS TRANSACTIONS, vol. 45, no. 1, 1 January 2004 (2004-01-01), JP, pages 143 - 148, XP055854647, ISSN: 1345-9678, DOI: 10.2320/matertrans.45.143

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