

Title (en)

PRODUCTION OF A HARD METAL BODY WITH HARDNESS GRADIENT, SUCH AS PUNCHING TOOLS

Title (de)

HERSTELLUNG EINES HARTMETALLKÖRPERS MIT GRADIERTER HÄRTE, WIE ZUM BEISPIEL STANZWERKZEUGE

Title (fr)

PRODUCTION D'UN CORPS EN METAL DUR A GRADIENT DE DURETE, TELS DES OUTILS DE POIN ONNAGE

Publication

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Application

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Abstract (en)

[origin: WO0220863A1] The invention relates to a method for the production of a body made of hard metal, consisting of a hard compound A and a binder B, wherein pulverulent A and B, or an optionally precompacted article that contains A and B, are introduced into a container and the material containing A and B is compacted in order to increase the relative density (RD) to a value that is higher than 70% of the theoretical maximum density (TMD). The invention further relates to a body of hard metal comprising a hard compound A and a binder B, the mass ratio of A:B gradually changing over a cross-section of the body in order to impart to said body different mechanical properties in one zone Za or to one end (T) and hardness in one zone Zb or to another end (H). The invention also relates to the use of dynamic compaction techniques for the production of such bodies.

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