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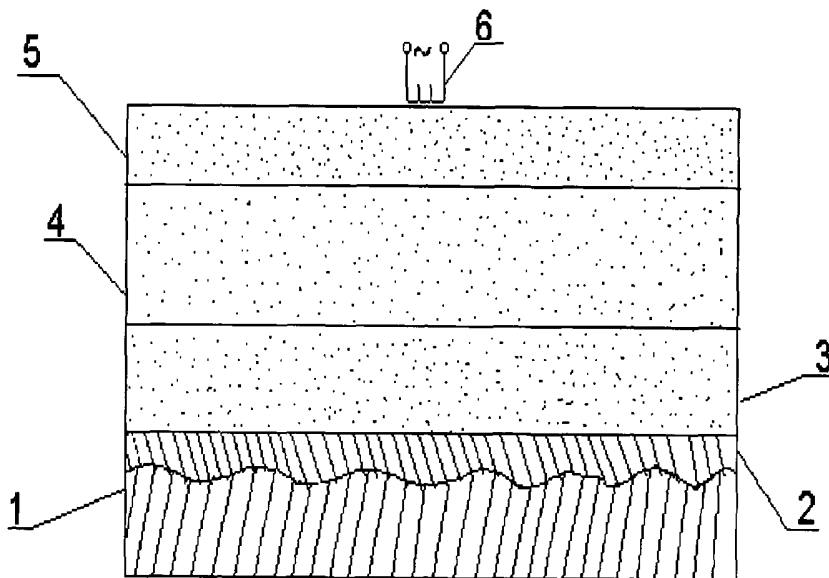
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[Continued on next page]

(54) Title: SPUTTERING TARGET AND METHOD OF ITS FABRICATION



(57) Abstract: This invention relates to powder metallurgy, more specifically, to methods of fabricating ceramics and hard alloy items using self-propagating high-temperature synthesis (SHS). For the method of fabricating a sputtering target for the synthesis of coatings, at least three pellets are fabricated to form said sputtered working layer (4), said intermediate layer (3) and an initiating layer (5) at least from three powdered mixtures having exothermal compositions capable of chemical interaction in SHS mode after the local heat-initiated reaction. The sputtered working layer and the intermediate layer are bonded to a shaped metallic plate (1) through a metallic solder layer (2). Finally, said initiating layer is removed.

WO 2007/054369 A3



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. C23C14/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	E.A.LEVASHOV ET AL: "Self-propagating high-temperature synthesis of functionally graded PVD targets with a ceramic working layer of TiB ₂ -TiN or Ti ₅ Si ₃ -TiN" JOURNAL OF MATERIALS SYNTHESIS AND PROCESSING, vol. 10, no. 6, 1 November 2002 (2002-11-01), pages 319-330, XP002427614 US	1,2,5-10
A	the whole document	11-22
Y	JP 55 097472 A (MURATA MANUFACTURING CO) 24 July 1980 (1980-07-24) abstract	1,2,5-10

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 55097472 A	24-07-1980	JP 60018749 B	11-05-1985