Title (en)
METHOD FOR PRODUCING NEAR NET SHAPE PLANAR SPUTTERING TARGETS AND AN INTERMEDIATE THEREFOR

Title (de)
VERFAHREN ZUR ERZEUGUNG EINES ENDABMESSUNGSNAHEN PLANAREN SPUTTERTARGETS UND ZWISCHENPRODUKT DAFÜR

Title (fr)
PROCEDE DE PRODUCTION DE SUBSTRATS PLANS DE FORME QUASIMENT NETTE POUR PULVERISATION CATHODIQUE ET INTERMEDIAIRE DESTINE A CE PROCEDE

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Application
EP 97906532 A 19970213

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Abstract (en)
[origin: WO9731739A1] A preferred method for producing a pair of sputter targets includes the step of machining first and second backing plates to form surfaces having near net profiles characteristic of an ion source, the sputtering material and the target shape. A preform is constructed which includes the first backing plate (34), a first powder layer (36) abutting against the first backing plate, a spacer (38) abutting against the first powder layer, a second powder layer (40) abutting against the spacer, and the second backing plate abutting against the second powder layer. In a preferred form, the spacer comprises a pair of metal plates separated by a layer of bond-resistant material such as boron nitride. The preform is heated and isostatically pressed to consolidate the powder layers to form the pair of sputter targets and to diffusion bond the targets to corresponding backing plates. The method promotes the formation of uniformly even sputtering surfaces on the targets.

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