

Title (en)  
Methods of producing a powder compact and a sintered composite body

Title (de)  
Verfahren zur Herstellung eines kompakten Puder- und gesinterten Verbundkörpers

Title (fr)  
Procédés de production de poudre compacte et corps composite fritté

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Application  
**EP 09161550 A 20090529**

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Abstract (en)  
The invention relates to a method of producing a powder compact comprising: in a press tool comprising a die, at least two bottom punches and a top punch, encapsulating a powder B within one or more powders A, the encapsulated powder B and the one or more powders A having different compositions, the encapsulation being made by stepwise positioning, an inner bottom punch and an outer bottom punch surrounding the inner bottom punch, so that a filling space within the die is provided above a punch after each positioning step, one of the powders A or B are introduced into each filling space provided so that powder B is encapsulated within the one or more powders A, and, pressing the combination of powders between the bottom punches and the top punch thereby forming a compact. An additional sintering step provides a sintered body. The invention further relates to a powder compact comprising a pressed powder B encapsulated within one or more pressed powders A, the powders having different compositions. The invention further relates to a sintered body comprising a first sintered material encapsulated within at least one further sintered material, the first and further materials differ in at least one characteristic.

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