

Title (en)
PROCESS FOR PRODUCING TURBO-ROTORS

Publication
EP 0036202 B1 19840613 (DE)

Application
EP 81101907 A 19810314

Priority
DE 3010299 A 19800318

Abstract (en)
[origin: US4383809A] A capsule for use in hot isostatic pressing of a complex-shape workpiece, comprising a ceramic core formed with a cavity having the negative contour of the workpiece, the cavity being open on one side of the core. A metal skin encloses the core, the skin being spaced from the side of the core having the cavity opening and snugly fitting all the remaining sides of the core. The skin has a port through which metal powder can be introduced into the cavity and the space between the skin and core. Where the capsule is used to make a turbomachine rotor having centrifugal blading, the spacing between the skin and core side corresponds to the thickness of the rotor disk. The manufacturing method includes inserting blades of sheet metal into the blade matrices of the cavity, followed by filling the remainder of the cavity with metal powder and then isostatically hot pressing the powder.

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B22F 5/04; F01D 5/34

IPC 8 full level
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CPC (source: EP US)
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