

## Title (en)

Process for the production of a shaped product from metallic or ceramic powder.

## Title (de)

Verfahren zur Herstellung eines Bauteils durch Erzeugung eines Formkörpers ausgehend von einem metallischen oder keramischen Pulver.

## Title (fr)

Procédé de préparation d'une ébauche à partir d'une poudre métallique ou céramique.

## Publication

**EP 0446665 A1 19910918 (DE)**

## Application

**EP 91102390 A 19910220**

## Priority

CH 81590 A 19900314

## Abstract (en)

[origin: JPH04224604A] PURPOSE: To manufacture parts which is relatively complex in a shape, arbitrary in a cross section shape and free from any limitation in wall thickness out of smooth metal powder, ceramic powder or synthetic resin powder. CONSTITUTION: Powder is placed in a mold 13 through which a gas is passed. The mold is formed of a deposited body of ceramic grains and the ceramic grains are bound by the composition of small amount of a binding agent which is approximately and organically formed. The mold 13 has large mechanical strength to support a formed body in a temperature range between a room temperature and a temperature just below a sintering temperature of the powder to form the formed body. The binding agent loses its strength that is, its supporting action in a temperature range where the formed body achieves a sufficient peculiar stability to guarantee the shape by starting a sintering process and the binding agent loses its strength and supporting action by locally or wholly being evaporated and/or burned.

## Abstract (de)

Verfahren zur Herstellung eines Bauteils, wobei metallisches oder keramisches Pulver (6) auf die Innenwand einer unter vermindertem Druck stehenden sich in einem Unterdruckbehälter (10) befindlichen, gasdurchlässigen Form (13) aufgeschleudert und vorverfestigt wird, worauf die Form (13) aus dem Behälter (10) herausgenommen und gesintert wird. Die Form (13) besteht aus einem Haufwerk keramischer Körner mit einem organischen Binder mit hoher Festigkeit zwischen Raumtemperatur und einer Temperatur dicht unterhalb Sintertemperatur zwecks Stützung des zum Bauteil zu sinternden Pulvers (6). Bei einsetzendem Sintern verdampft oder verbrennt der Binder, wodurch die Form (13) ihre Stützwirkung des Bauteils weitgehend verliert. Binder: Aminoplast, Phenoplast, Furanharz. <IMAGE>

## IPC 1-7

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## IPC 8 full level

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## CPC (source: EP US)

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## C-Set (source: EP US)

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## Citation (search report)

- [Y] DE 3101236 A1 19820128 - BUEHLER EUGEN [DE], et al
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- [A] CH 667840 A5 19881115 - SULZER AG

## Cited by

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