

Title (en)

METHOD FOR MANUFACTURING METAL PARTS

Title (de)

VERFAHREN ZUR FERTIGUNG VON METALLTEILEN

Title (fr)

PROCEDE DE PRODUCTION DE PIECES METALLIQUES

Publication

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Application

EP 01929442 A 20010322

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Abstract (en)

[origin: WO0172456A1] The invention relates to a method for producing metal bodies by mixing metal compound particles with a binding agent and compacting them to form shaped parts, whereby the binding agent is subsequently removed and the metal compound is reduced to metal by gassing the same with a reductive gas at high temperatures. The reduction is carried out at temperatures lower than the sintering temperature of the reduced metal compound so that the formed reduced shaped bodies, while maintaining their original dimensions to a large extent, have a density less than that of the metal compound used. The metallic matrix obtained in such a manner can be subjected to a post compaction by applying mechanical forces. High-strength steel parts having very low residual porosities and a high geometric tolerance are obtained by sintering the matrix at usual sintering temperatures after compaction.

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Citation (search report)

See references of WO 0172456A1

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DE102008042047A1; CN108500276A; US7425284B2; WO2005035813A3; DE102013212528A1; WO2014206890A1; US10220443B2

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