

Title (en)

Stainless steel powder for high temperature applications

Title (de)

Rostfreies Stahlpulver für Hochtemperaturanwendungen

Title (fr)

Poudre d'acier inoxydable pour applications à haute température

Publication

EP 1550734 A1 20050706 (EN)

Application

EP 04027718 A 20041123

Priority

US 73319303 A 20031211

Abstract (en)

A method of producing parts from powdered metal comprising the steps of providing a metallurgic powder comprising iron, 0-0.6 weight percent carbon, 0.5-5.0 weight percent silicon, 0.5-6.0 weight percent nickel, 0.5-1.5 weight percent molybdenum, 0-0.7 weight percent manganese, and 12-20 weight percent chromium, the weight percentages calculated based on the total weight of the powder. Secondly, the powders are compressed at a pressure of 35 to 65 tsi to provide a green compact. Then, the compact is heated in an atmosphere to a temperature of 2100 DEG F to 2400 DEG F for 20 to 90 minutes, such that the resulting microstructure of the compact is either single phase ferritic or dual phase ferritic and austenitic.

<IMAGE>

IPC 1-7

C22C 33/02; **B22F 3/00**

IPC 8 full level

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CPC (source: EP KR US)

B22F 3/12 (2013.01 - KR); **B22F 3/23** (2013.01 - KR); **B22F 5/02** (2013.01 - KR); **B22F 5/10** (2013.01 - KR); **C22C 33/0285** (2013.01 - EP US); **B22F 2998/00** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

DE FR IT

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DOCDB simple family (application)

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