

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>

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

IPC 8 full level
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Citation (search report)
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Designated contracting state (EPC)
DE FR IT

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EP 1550734 A1 20050706; CN 1626298 A 20050615; JP 2005171382 A 20050630; KR 20050058215 A 20050616; US 2005129563 A1 20050616

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