

Title (en)
METHOD FOR THE PRODUCTION OF PRECISE COMPONENTS BY MEANS OF LASER SINTERING

Title (de)
VERFAHREN ZUR HERSTELLUNG PRÄZISER BAUTEILE MITTELS LASERSINTERN

Title (fr)
PROCEDE DE FABRICATION DE COMPOSANTS DE PRECISION PAR SINTERISATION AU LASER

Publication
EP 1307311 A1 20030507 (DE)

Application
EP 01956414 A 20010727

Priority
• DE 0102885 W 20010727
• DE 10039143 A 20000807

Abstract (en)
[origin: DE10039143C1] Production of precise components comprises laser sintering a powdered material consisting of iron powder and further powder alloying elements which produce a powder alloy during the course of the sintering process; and homogenizing, annealing, heat treating, degrading inner faults and/or improving the surface quality. Preferred Features: The powder elements contain (in wt.%): 0.01-2 carbon, up to 1 silicon, up to 10 copper, up to 2 tin, up to 10 nickel, up to 6 molybdenum, up to 2 or 10-13 manganese, up to 5 or 12-18 chromium, up to 2 cobalt, up to 5 tungsten, up to 1 vanadium, up to 0.5 titanium, up to 1 phosphorus, and up to 1 boron. The powder mixture consists of particles with a grain size of 50 to a maximum of 100 mu m.

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B22F 3/105

IPC 8 full level
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CPC (source: EP US)
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See references of WO 0211928A1

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