

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  
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• 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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IPC 8 full level  
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