

Title (en)

METHOD FOR PRODUCING COMPONENTS BY METALLIC POWDER INJECTION MOULDING

Title (de)

VERFAHREN ZUR HERSTELLUNG VON BAUTEILEN DURCH METALLPULVERSPRITZGUSS

Title (fr)

PROCEDE DE PRODUCTION DE COMPOSANTS PAR UN PROCEDE DE MOULAGE PAR INJECTION DE POUDRE METALLIQUE

Publication

EP 1119429 B1 20030702 (DE)

Application

EP 99950466 A 19990728

Priority

- DE 9902343 W 19990728
- DE 19834237 A 19980729

Abstract (en)

[origin: WO0006327A3] The invention relates to a method for producing components by metallic powder injection moulding of metallic powder parts coated with a binding agent in an injection mould. According to said method the metallic powder parts of a titanium alloy are used to produce components having a complex shape. During the production of the components, the stages production of the metallic powder parts for the titanium alloy, preparation of the feed-stocks with a binding agent, release of the binding agent and sintering are carried out exclusively in an ultrapure protective atmosphere of protective gas and/or in the absence of air and/or under vacuum. The metallic powder parts and the binding agent ingredients are such that they are poor in impurities. The sinter support for the components is configured in such a way that during sintering of the components the free slip of the surface of the sinter support for the components positioned thereon remains intact.

IPC 1-7

B22F 3/22

IPC 8 full level

B22F 1/10 (2022.01); **B22F 3/22** (2006.01)

CPC (source: EP US)

B22F 1/10 (2022.01 - EP US); **B22F 3/22** (2013.01 - EP); **B22F 3/225** (2013.01 - EP US); **B22F 2998/00** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

C-Set (source: EP)

1. **B22F 2998/00 + B22F 9/082**
2. **B22F 2998/00 + B22F 3/225**
3. **B22F 2998/10 + B22F 3/22 + B22F 3/1007 + B22F 3/15**
4. **B22F 2999/00 + B22F 3/1007 + B22F 2201/10 + B22F 2201/20**
5. **B22F 2999/00 + B22F 9/082 + B22F 2201/10 + B22F 2201/20**
6. **B22F 2999/00 + B22F 3/22 + B22F 2201/10 + B22F 2201/20**

Cited by

EP2292806A1; EP1621272A3; DE102006005034A1; DE10337672A1; DE10337672B4; US9533353B2; US9145787B2; US8021604B2; US8206645B2; EP3231536A1; WO2017178289A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0006327 A2 20000210; WO 0006327 A3 20000504; AT E244088 T1 20030715; DE 19935276 A1 20000210; DE 59906204 D1 20030807; EP 1119429 A2 20010801; EP 1119429 B1 20030702

DOCDB simple family (application)

DE 9902343 W 19990728; AT 99950466 T 19990728; DE 19935276 A 19990728; DE 59906204 T 19990728; EP 99950466 A 19990728