

Title (en)

Wear resisting component made by metal melting

Title (de)

Bauteil aus einem verschleissfesten, schmelzmetallurgisch hergestellten Werkstoff

Title (fr)

Composant résistant à l'usure, préparé par fusion de métal

Publication

EP 0890652 A3 20010822 (DE)

Application

EP 98890195 A 19980703

Priority

AT 118597 A 19970710

Abstract (en)

[origin: EP0890652A2] In a component, tool or the like made of wear resistant solidified material has a microstructure of metal compound particles (carbide, nitride, carbonitride, boride and/or oxide) in a metallic matrix. At least the wear-exposed region consists of up to 10 (preferably up to 15, especially more than 22) vol.% group IVa and/or Va metal compound(s). Density of the wear exposed region is different to that of the matrix. Also claimed is production of a material for the above component, tool or the like by introducing or forming (by reaction) the above particles in a metal melt and then allowing the melt to solidify. Further claimed is equipment for producing the above component, tool or the like by the above process, in which the casting mould is rotated for subjecting the particles to radial acceleration for disintegration and concentration in the wear-exposed component or tool.

IPC 1-7

C22C 1/10

IPC 8 full level

C22C 1/10 (2006.01)

CPC (source: EP)

C22C 1/1036 (2013.01)

Citation (search report)

- [XD] US 3929471 A 19751230 - AKAHORI KIMIHIKO, et al
- [X] US 5246056 A 19930921 - LOMAX DONALD P [US], et al
- [X] US 4399198 A 19830816 - LOMAX DONALD P [US], et al
- [X] US 4089466 A 19780516 - LOMAX DONALD P, et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 277 (C - 0954) 22 June 1992 (1992-06-22)

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)

EP 0890652 A2 19990113; EP 0890652 A3 20010822; AT 407646 B 20010525; AT A118597 A 20000915

DOCDB simple family (application)

EP 98890195 A 19980703; AT 118597 A 19970710