

Title (en)

Component for high temperatures, in particular turbine blade, and process for preparing this blade

Title (de)

Bauteil für hohe Temperaturen, insbesondere Turbinenschaufeln, und Verfahren zur Herstellung dieses Bauteils

Title (fr)

Élément pour température élevée, en particulier aube de turbine et procédé de fabrication de cet élément

Publication

EP 0574708 B1 19980916 (DE)

Application

EP 93107926 A 19930514

Priority

DE 4219470 A 19920613

Abstract (en)

[origin: EP0574708A1] The component is intended for use at high temperatures and is designed especially as a turbine blade. It contains a component body comprising at least a first section (blade root 3) and a second section (blade leaf 2). The first section (3) is formed from a ductile material. However, the second section (2) is of a material which is brittle as compared with the ductile material. It is intended that this component is distinguished by a long service life. This is achieved in such a way that each of the two materials contains in each case one of two alloys based on a common principal material and of different chemical compositions, which differ from one another by the presence and/or the quantity of at least one doping substance alloyed with the principal material. <IMAGE>

IPC 1-7

B22F 5/04; **B22F 7/06**; **F01D 5/28**

IPC 8 full level

B22F 5/04 (2006.01); **B22F 7/06** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

B22F 5/04 (2013.01 - EP US); **B22F 7/06** (2013.01 - EP US); **F01D 5/28** (2013.01 - EP US); **Y10T 428/12021** (2015.01 - EP US); **Y10T 428/12028** (2015.01 - EP US); **Y10T 428/1216** (2015.01 - EP US); **Y10T 428/12174** (2015.01 - EP US)

Cited by

CN103790640A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0574708 A1 19931222; **EP 0574708 B1 19980916**; DE 4219470 A1 19931216; DE 59308980 D1 19981022; US 5409781 A 19950425

DOCDB simple family (application)

EP 93107926 A 19930514; DE 4219470 A 19920613; DE 59308980 T 19930514; US 7093393 A 19930604