

Title (en)

METHOD AND DEVICE FOR PRODUCING A COMPONENT OF A TURBOMACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES BAUTEILS EINER STRÖMUNGSMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT LA FABRICATION D'UN ÉLÉMENT D'UNE TURBOMACHINE

Publication

**EP 2493650 A2 20120905 (DE)**

Application

**EP 10798474 A 20101030**

Priority

- DE 102009051551 A 20091031
- DE 2010001275 W 20101030

Abstract (en)

[origin: WO2011050790A2] The invention relates to a method for producing a component (10) of a turbomachine, especially a structural part of a turbine or a compressor, the method being a generative production method for the layer-by-layer buildup of the component (10). After production of one or more successive component layers pressure is applied to at least sections of the surface of the most recently produced component layer (12), the pressure being induced by laser or plasma. The invention further relates to a device for producing a component (10) of a turbomachine, especially a structural part of a turbine or a compressor, the device (26) comprising at least one powder feed (28) for the deposition of at least one powder component material (16) onto a component platform, at least one radiation source (14) for a local layer-by-layer fusion or sintering of the component material (16) and at least one laser radiation source (20) or at least one plasma impulse source.

IPC 8 full level

**B23K 26/34** (2006.01); **B23K 26/00** (2006.01)

CPC (source: EP US)

**B22F 5/04** (2013.01 - EP US); **B22F 10/28** (2021.01 - EP US); **B22F 10/364** (2021.01 - EP US); **B22F 10/50** (2021.01 - EP US);  
**B22F 12/43** (2021.01 - EP US); **B23K 26/32** (2013.01 - EP US); **B23K 26/34** (2013.01 - EP US); **B23K 26/342** (2015.10 - EP US);  
**B23K 26/356** (2015.10 - EP US); **B23K 35/005** (2013.01 - EP US); **B23K 35/007** (2013.01 - EP US); **B23K 35/0244** (2013.01 - EP US);  
**B28B 1/001** (2013.01 - EP US); **B32B 18/00** (2013.01 - EP US); **C04B 35/16** (2013.01 - EP US); **C04B 35/645** (2013.01 - EP US);  
**B22F 10/36** (2021.01 - EP US); **B22F 12/41** (2021.01 - EP US); **B22F 2999/00** (2013.01 - EP US); **B23K 2101/001** (2018.07 - EP US);  
**B23K 2103/08** (2018.07 - EP US); **B23K 2103/14** (2018.07 - EP US); **B23K 2103/26** (2018.07 - EP US); **B23K 2103/52** (2018.07 - EP US);  
**C04B 2235/6026** (2013.01 - EP US); **C04B 2235/665** (2013.01 - EP US); **C04B 2237/341** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP US)

Citation (search report)

See references of WO 2011050790A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102009051551 A1 20110505**; EP 2493650 A2 20120905; US 2012217226 A1 20120830; WO 2011050790 A2 20110505;  
WO 2011050790 A3 20110623

DOCDB simple family (application)

**DE 102009051551 A 20091031**; DE 2010001275 W 20101030; EP 10798474 A 20101030; US 201013505189 A 20101030