

Title (en)

METHOD FOR PRODUCING AN OBJECT BY MEANS OF GENERATIVE MANUFACTURING, COMPONENT, IN PARTICULAR FOR AN AIRCRAFT OR SPACECRAFT, AND COMPUTER-READABLE MEDIUM

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES OBJEKTS MITTELS GENERATIVER FERTIGUNG, BAUTEIL, INSBESONDERE FÜR EIN LUFT- ODER RAUMFAHRZEUG, UND COMPUTERLESBARES MEDIUM

Title (fr)

PROCÉDÉS SERVANT À FABRIQUER UN OBJET AU MOYEN D'UNE PRODUCTION GÉNÉRATIVE, COMPOSANT, EN PARTICULIER POUR UN ENGINE AÉRONAUTIQUE OU SPATIAL, ET SUPPORT LISIBLE PAR ORDINATEUR

Publication

EP 3624968 A1 20200325 (DE)

Application

EP 18725207 A 20180516

Priority

- DE 102017208520 A 20170519
- EP 2018062781 W 20180516

Abstract (en)

[origin: WO2018210951A1] The invention relates to a method for producing an object by means of generative manufacturing. The invention also relates to a component, in particular for an aircraft or spacecraft, and to a computer-readable medium. In the case of a first method, a sheet-like component with a multiplicity of protrusions is formed. In the case of a second method, a supporting structure with at least one arc is formed, wherein the arc is formed with arc segments that converge substantially in the direction in which the object is built up and meet at a tip of the arc. In the case of a third method, a supporting structure with at least one structure of a cloverleaf-like cross-sectional shape is formed. In the case of a fourth method, a supporting structure with a sheet-like component is formed, wherein the sheet-like component is connected to the object and is formed as projecting forwards at an angle from the object in the direction in which the object is built up. In the case of a fifth method, a supporting structure with a sheet-like component extending substantially along the direction in which the object is built up is formed, wherein the sheet-like component is formed with a multiplicity of openings. In the case of a sixth method, a supporting structure with a sheet-like component is formed, wherein the sheet-like component is connected to the object and, in the region of a transition of the same to the object to be generated, is provided with a perforation and/or a predetermined breaking edge along a contour of the object.

IPC 8 full level

B22F 3/105 (2006.01); **B33Y 10/00** (2015.01); **B33Y 80/00** (2015.01)

CPC (source: EP US)

B22F 10/20 (2021.01 - US); **B22F 10/40** (2021.01 - US); **B22F 10/47** (2021.01 - EP US); **B29C 64/40** (2017.08 - EP US); **B33Y 10/00** (2014.12 - EP US); **B33Y 80/00** (2014.12 - EP US); **B22F 10/28** (2021.01 - EP US); **B33Y 50/02** (2014.12 - EP); **Y02P 10/25** (2015.11 - EP)

Citation (examination)

- US 2017136539 A1 20170518 - CHOU YUAG-SHAN [US], et al
- DE 102016204905 A1 20170928 - EOS GMBH ELECTRO OPTICAL SYSTEMS [DE]
- See also references of WO 2018210951A1

Cited by

CN113232289A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2018210951 A1 20181122; CN 110312585 A 20191008; CN 110312585 B 20221118; CN 115722684 A 20230303; DE 102017208520 A1 20181122; EP 3624968 A1 20200325; US 11504771 B2 20221122; US 2020139436 A1 20200507; US 2023085738 A1 20230323

DOCDB simple family (application)

EP 2018062781 W 20180516; CN 201880012968 A 20180516; CN 202211420524 A 20180516; DE 102017208520 A 20170519; EP 18725207 A 20180516; US 201916670655 A 20191031; US 202217992016 A 20221122