

Title (en)  
METHOD FOR THE ADDITIVE MANUFACTURING OF A COMPONENT

Title (de)  
VERFAHREN ZUR ADDITIVEN HERSTELLUNG EINES BAUTEILS

Title (fr)  
PROCÉDÉ DESTINÉ À LA FABRICATION ADDITIVE D'UN ÉLÉMENT

Publication  
**EP 4308329 A1 20240124 (DE)**

Application  
**EP 22729204 A 20220517**

Priority  
• EP 21180372 A 20210618  
• EP 2022063225 W 20220517

Abstract (en)  
[origin: WO2022263078A1] The invention relates to a method for the additive manufacturing of a component (2), comprising the following steps: creating a machine code; creating a generalised anomaly detection model and creating an adaptive anomaly detection model; transferring the machine code and the detection models to a control system; starting the manufacturing process; monitoring the process with sensors; evaluating sensor signals of the manufacturing process with the help of the generalised anomaly detection model; parallel teaching of a specialised anomaly detection model from an adaptive anomaly detection model by means of process data of the running manufacturing process; detection of anomalies in the production of the component with the help of the specialised anomaly detection model during the manufacturing process.

IPC 8 full level  
**B22F 10/25** (2021.01); **B22F 10/85** (2021.01); **B22F 12/90** (2021.01); **B23K 9/04** (2006.01); **B23K 26/02** (2014.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01); **B33Y 50/02** (2015.01); **G06N 3/04** (2023.01); **G06N 3/08** (2023.01)

CPC (source: EP US)  
**B22F 10/25** (2021.01 - EP); **B22F 10/85** (2021.01 - EP US); **B22F 12/90** (2021.01 - EP US); **B23K 9/042** (2013.01 - US); **B33Y 10/00** (2014.12 - EP); **B33Y 30/00** (2014.12 - EP); **B33Y 50/02** (2014.12 - EP); **G06N 3/045** (2023.01 - EP); **G06N 3/08** (2013.01 - EP); **B23K 9/04** (2013.01 - EP); **B33Y 10/00** (2014.12 - US); **B33Y 30/00** (2014.12 - US); **B33Y 50/02** (2014.12 - US)

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4104955 A1 20221221**; CN 117480021 A 20240130; EP 4308329 A1 20240124; US 2024286198 A1 20240829; WO 2022263078 A1 20221222

DOCDB simple family (application)  
**EP 21180372 A 20210618**; CN 202280042490 A 20220517; EP 2022063225 W 20220517; EP 22729204 A 20220517; US 202218570775 A 20220517