

Title (en)

METHOD FOR DISCHARGING PARTICULATE BUILDING MATERIAL IN A 3D PRINTER

Title (de)

VERFAHREN ZUM AUSTRAGEN VON PARTIKELFÖRMIGEM BAUMATERIAL IN EINEM 3D-DRUCKER

Title (fr)

PROCÉDÉ POUR ÉVACUER UN MATÉRIAU DE CONSTRUCTION PARTICULAIRE DANS UNE IMPRIMANTE 3D

Publication

**EP 4313548 A1 20240207 (DE)**

Application

**EP 22718048 A 20220322**

Priority

- DE 102021001534 A 20210324
- DE 2022000029 W 20220322

Abstract (en)

[origin: WO2022199735A1] The invention relates to a method for discharging particulate building material in a 3D printer, in which method: the building material curtain (6) consisting of particulate building material (2) is optically monitored in a working step in which the particulate building material (2) is discharged in a region of the building material curtain (6) between the applicator (1) and the construction area (4); an image of the building material curtain (6) is generated and/or at least one dimension of the building material curtain (6) is determined; the image and/or the at least one dimension is compared with an associated reference image and/or a predefined reference value and, if the image deviates from the reference image and/or the dimension deviates from the associated reference value, at least one discharge parameter for discharging the particulate building material (2) is changed.

IPC 8 full level

**B29C 64/153** (2017.01); **B22F 10/14** (2021.01); **B22F 10/28** (2021.01); **B22F 10/37** (2021.01); **B22F 10/85** (2021.01); **B22F 12/52** (2021.01); **B22F 12/90** (2021.01); **B29C 64/165** (2017.01); **B29C 64/329** (2017.01); **B29C 64/393** (2017.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01); **B33Y 50/02** (2015.01)

CPC (source: EP KR US)

**B22F 10/14** (2021.01 - EP KR); **B22F 10/28** (2021.01 - EP KR US); **B22F 10/31** (2021.01 - EP KR); **B22F 10/37** (2021.01 - EP KR US); **B22F 10/85** (2021.01 - EP KR); **B22F 12/52** (2021.01 - EP KR US); **B22F 12/90** (2021.01 - EP KR US); **B29C 64/153** (2017.08 - EP KR US); **B29C 64/165** (2017.08 - EP KR); **B29C 64/214** (2017.08 - KR); **B29C 64/329** (2017.08 - EP KR US); **B29C 64/393** (2017.08 - EP KR US); **B33Y 10/00** (2014.12 - EP KR US); **B33Y 30/00** (2014.12 - EP KR); **B33Y 40/00** (2014.12 - KR); **B33Y 50/02** (2014.12 - EP KR 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)

**DE 102021001534 A1 20220929**; CN 117042949 A 20231110; EP 4313548 A1 20240207; JP 2024513749 A 20240327; KR 20230159825 A 20231122; US 2024066600 A1 20240229; WO 2022199735 A1 20220929

DOCDB simple family (application)

**DE 102021001534 A 20210324**; CN 202280023114 A 20220322; DE 2022000029 W 20220322; EP 22718048 A 20220322; JP 2023558341 A 20220322; KR 20237030232 A 20220322; US 202218263710 A 20220322