

Title (en)

PARTICLE SEPARATION DEVICE FOR ADDITIVE MANUFACTURE AND ADDITIVE MANUFACTURING APPARATUS

Title (de)

PARTIKELTRENNVORRICHTUNG FÜR GENERATIVE FERTIGUNG UND VORRICHTUNG ZUR GENERATIVEN FERTIGUNG

Title (fr)

DISPOSITIF DE SÉPARATION DE PARTICULES POUR FABRICATION ADDITIVE ET APPAREIL DE FABRICATION ADDITIVE

Publication

EP 4048451 A1 20220831 (FR)

Application

EP 20807074 A 20201020

Priority

- FR 1911930 A 20191024
- FR 2020051892 W 20201020

Abstract (en)

[origin: WO2021079057A1] The invention relates to a particle separation device for selective additive manufacture and to a selective additive manufacturing apparatus. The particles are contained in a gaseous stream. The device comprises a dry-type pressurized-air separator (101), said dry-type pressurized-air separator comprising a separating turbine of which a rotary speed is adjustable. The dry-type pressurized-air separator selects the particles contained in the gaseous stream according to a particle size dependent on the rotary speed of the separating turbine. The device further comprises a device (102) for extracting particles contained in the gaseous stream. Fluidic communication between the dry-type pressurized-air separator and the extraction device is such that a gaseous stream exiting the dry-type pressurized-air separator circulates in the extraction device and that the gaseous stream exiting the extraction device circulates in the dry-type pressurized-air separator. The device further comprises a device (103) for circulating the gaseous stream between the dry-type pressurized-air separator and the extraction device.

IPC 8 full level

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Citation (search report)

See references of WO 2021079057A1

Designated contracting state (EPC)

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FR 3102375 A1 20210430; **FR 3102375 B1 20230908**; CN 114616058 A 20220610; EP 4048451 A1 20220831; JP 2022553759 A 20221226; KR 20220087500 A 20220624; US 2022379347 A1 20221201; WO 2021079057 A1 20210429

DOCDB simple family (application)

FR 1911930 A 20191024; CN 202080075373 A 20201020; EP 20807074 A 20201020; FR 2020051892 W 20201020; JP 2022524199 A 20201020; KR 20227016944 A 20201020; US 202017771304 A 20201020