

Title (en)
POWDER DRYING IN GENERATIVE PRODUCTION

Title (de)
PULVERTROCKNUNG BEI DER GENERATIVEN FERTIGUNG

Title (fr)
SÉCHAGE DE POUDRE DANS LE CADRE D'UNE FABRICATION ADDITIVE

Publication
EP 3475015 A1 20190501 (DE)

Application
EP 17733423 A 20170622

Priority
• DE 102016111660 A 20160624
• EP 2017065453 W 20170622

Abstract (en)
[origin: WO2017220744A1] A production device (1) for the generative production of a three-dimensional component (3) from a powder (5) has a production space (11), which provides a working surface (21) and comprises a building platform area (23A) and a powder reservoir area (23B). The production device (1) also has a spraying source (51) for producing a jet for spraying powder (5) in the building platform area (23A) for producing the component (3) layer by layer, a powder storage container (25) for providing the powder (5) through a providing opening (21B) in the working area (21) into the powder reservoir area (23B) and a pushing device (19) for transferring the powder from the powder reservoir area (23B) into the building platform area (23A). The production device (1) also has a gas system (41), for example a gas circulating system, for providing a drying gas stream (40), which flows via the providing opening (21B) in the working surface (21) for taking up moisture from an uppermost layer of powder (5A).

IPC 8 full level
B22F 3/105 (2006.01); **B28B 1/00** (2006.01); **B29C 64/153** (2017.01)

CPC (source: EP US)
B22F 12/52 (2021.01 - EP US); **B22F 12/70** (2021.01 - EP US); **B29C 64/153** (2017.07 - EP); **B29C 64/364** (2017.07 - EP); **B33Y 10/00** (2014.12 - EP US); **B33Y 30/00** (2014.12 - EP); **B22F 10/28** (2021.01 - EP US); **B22F 2999/00** (2013.01 - EP); **B28B 1/001** (2013.01 - EP); **Y02P 10/25** (2015.11 - EP)

Citation (search report)
See references of WO 2017220744A1

Designated contracting state (EPC)
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Designated extension state (EPC)
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DOCDB simple family (publication)
DE 102016111660 A1 20171228; CN 109475937 A 20190315; EP 3475015 A1 20190501; WO 2017220744 A1 20171228

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DE 102016111660 A 20160624; CN 201780039282 A 20170622; EP 17733423 A 20170622; EP 2017065453 W 20170622