

Title (en)

METHOD FOR PRODUCING A POWDER COMPRISING AT LEAST ONE POLYMER AND SAID TYPE OF POWDER

Title (de)

VERFAHREN ZUM HERSTELLEN EINES MINDESTENS EIN POLYMER UMFASSENDEN PULVERS SOWIE DERARTIGES PULVER

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE POUDRE COMPRENANT AU MOINS UN POLYMÈRE AINSI QUE POUDRE DE CE TYPE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2019206921A1] The invention relates to a method for producing a powder comprising at least one polymer for use in a method for additive production of a three-dimensional object. Said method comprising the step of mechanically treating the powder in a mixer having at least one rotating mixing blade element, wherein the powder is exposed to a temperature TB, wherein TB is at least 30 °C and below the melting point Tm of the polymer (determined in accordance with DIN EN ISO 11357) if the polymer is a partially crystalline polymer, or wherein TB is at least 30 °C and is at most 50 °C above the glass transition temperature Tg of the polymer (determined according to DIN EN ISO 11357) if the polymer is a fusible amorphous polymer. Compared to a point in time before the start of the treatment, the bulk density of the powder can be increased by at least 10% after the treatment (or in the case of polymer, copolymer or polymer blends of polyamide, it is increased by at least 2% and more) and the BET surface area of the powder is reduced by at least 10%, and optionally the pourability is improved by at least 10%.

IPC 8 full level

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Citation (search report)

See references of WO 2019206921A1

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