

Title (en)
POWDER BED-BASED ADDITIVE MANUFACTURING METHOD WITH SURFACE AFTERTREATMENT, AND SYSTEM WHICH IS SUITABLE FOR SAID MANUFACTURING METHOD

Title (de)
PULVERBETTBASIERTES ADDITIVES FERTIGUNGSVERFAHREN MIT OBERFLÄCHENNACHBEHANDLUNG UND FÜR DIESES FERTIGUNGSVERFAHREN GEEIGNETE ANLAGE

Title (fr)
PROCÉDÉ DE FABRICATION ADDITIVE SUR LIT DE POUDRE AVEC TRAITEMENT DE SURFACE ULTÉRIEUR, ET INSTALLATION APPROPRIÉE POUR LEDIT PROCÉDÉ DE FABRICATION

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Application
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Abstract (en)
[origin: WO2017005578A1] The invention relates to a powder bed-based additive manufacturing method which can be carried out in a system (11) for an additive manufacturing method. The invention also relates to a system of this type. It is provided according to the invention that an application apparatus (26) for an ablation medium, for example a print head, is provided in the system. By way of said application apparatus, laser peening can be carried out in an alternating manner with the additive manufacture of a component (25), by way of which laser peening inner surfaces (27) of the component can advantageously also be subjected to an aftertreatment in order to produce compressive stresses. To this end, a pulsed laser (28) is provided which can be operated in an alternating manner with the energy source (20) (laser) for the additive manufacturing method, wherein the ablation medium which is applied by way of the application apparatus (26) is evaporated by the pulsed laser (28), in order to produce the compressive stresses.

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