

Title (en)

METHOD FOR PREPARING A METAL POWDER FOR AN ADDITIVE MANUFACTURING PROCESS, AND USE OF SUCH A POWDER

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES METALLPULVERS FÜR EIN GENERATIVES FERTIGUNGSVERFAHREN UND VERWENDUNG EINES SOLCHEN PULVERS

Title (fr)

MÉTHODE DE PRÉPARATION D'UNE POUDRE MÉTALLIQUE DESTINÉE A UN PROCÉDÉ DE FABRICATION ADDITIVE, ET UTILISATION D'UNE TELLE POUDRE

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Application

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Abstract (en)

[origin: CA3144471A1] The present invention concerns a method for preparing a metal powder for an additive manufacturing process involving the near-infrared laser beam sweeping of a powder bed, characterized in that the method comprises: an initial step of selecting a powder having an optical reflectivity of more than 70% for a wavelength in a range between 800 and 1500 nm; then a step of treating said powder, which is different from a grafting of particles and which induces physical and/or chemical surface modification of the particles (4) of said powder so as to reduce its optical reflectivity at the given wavelength. The invention also concerns the use of such a powder, of which the particles (4) after treatment have a median particle size d50 of between 5 and 50 µm.

IPC 8 full level

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