

Title (en)
METHOD FOR GENERATING A COMPONENT BY A POWDER-BED-BASED ADDITIVE MANUFACTURING METHOD AND POWDER FOR USE IN SUCH A METHOD

Title (de)
VERFAHREN ZUM ERZEUGEN EINES BAUTEILS MIT EINEM PULVERBETTBASIERTEN ADDITIVEN FERTIGUNGSVERFAHREN UND PULVER ZUR VERWENDUNG IN EINEM SOLCHEN VERFAHREN

Title (fr)
PROCÉDÉ POUR PRODUIRE UN ÉLÉMENT STRUCTURAL AU MOYEN D'UN PROCÉDÉ DE FABRICATION ADDITIVE SUR LIT DE POUDRE ET POUDRE POUR UTILISER UN TEL PROCÉDÉ

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Abstract (en)
[origin: CA3035696A1] The invention relates to a method for generating a component (19) by a powder-bed-based additive manufacturing method, such as for example laser melting. According to the invention, it is envisaged to use a powder which comprises particles 25, consisting of a core (26) and a shell (27). Considered as a whole, the particles (25) have in this case the alloy composition of the component (19). However, the concentration of higher-melting alloy elements is greater in the shell (27) and the concentration of lower-melting alloy elements is greater in the core (26), and so the surface of the particles (25) is higher in comparison with particles with a constant alloy composition. This advantageously prevents the particles (25) from caking together in the powder bed during the production of the component (19), and so the powder bed can also be subjected to high preheating temperatures of up to 1000°C. The invention also relates to a powder that is suitable for use in the aforementioned method.

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