

Title (en)
ADDITIVE MANUFACTURING METHOD, POLYMER POWDER COMPOSITION COMPRISING A DETECTION ADDITIVE, AND OBJECT OBTAINED BY THE METHOD

Title (de)
VERFAHREN ZUR GENERATIVEN FERTIGUNG, POLYMERPULVERZUSAMMENSETZUNG MIT EINEM NACHWEISADDITIV UND MIT DEM VERFAHREN ERHALTENER GEGENSTAND

Title (fr)
PROCÉDÉ DE FABRICATION ADDITIVE, COMPOSITION DE POUDRE POLYMERE COMPORTANT UN ADDITIF DE DÉTECTION, ET OBJET OBTENU PAR LEDIT PROCÉDÉ

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Application
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Abstract (en)
[origin: US2024308132A1] The invention relates to a method for manufacturing a three-dimensional object, comprising locally raising the temperature of a powder using electromagnetic radiation in a heated chamber, causing the localised melting/coalescing of a layer of a predetermined thickness in order to form, after cooling, a solid polyamide layer, the method being characterised in that the powder comprises, relative to the total weight of the composition: —between 60% and 99% by weight of polyamide; —between 1% and 40% by weight of an optical and/or magnetic detection additive selected from the group formed by: pigments comprising a spinel structure containing a cation of a transition metal, the oxides of a transition metal, the sulphides of a transition metal; —between 0% and 5% by weight of a flow agent and in that the powder has: —a particle size distribution D50 of between 35 µm and 55 µm; and —a particle size distribution D10 of more than 15 µm; and—a particle size distribution D90 of less than 100 µm.

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