Title (en)
METHOD AND SYSTEM FOR AUTHENTICATING THE COMPUTER-AIDED MANUFACTURING OF A THREE-DIMENSIONAL PART

Title (de)
VERFAHREN UND SYSTEM ZUR AUTHENTIFIZIERUNG DER RECHNERGESTÜTZTEN HERSTELLUNG EINES DREIDIMENSIONALEN TEILS

Title (fr)
PROCÉDÉ ET SYSTÈME D'AUTHENTIFICATION DE FABRICATION ASSISTÉE PAR ORDINATEUR DE PIÈCE TRIDIMENSIONNELLE

Abstract (en)
[origin: WO2020007867A1] The invention relates to a method and system for authenticating the computer-aided manufacturing of a three-dimensional part by a manufacturing device, using at least one predetermined manufacturing material, said three-dimensional part to be manufactured being defined by a three-dimensional model obtained by computer-aided design and shown in a predetermined file format, said manufacturing device being controlled for manufacturing from said three-dimensional model and from a comprehensive set of manufacturing parameters. The method comprises the steps of: - generating (46) a cryptographic key (K') according to the parameter values of a non-empty parameter subset (SP') of the comprehensive set of manufacturing parameters, comprising at least one parameter of a set of configuration parameters of the manufacturing device, or at least one parameter of a set of parameters relating to the manufacturing method or at least one parameter of a set of characteristic parameters of the manufacturing material, - detecting (48) a watermark in said three-dimensional model by applying a predetermined watermark detection algorithm which is initialised with the generated cryptographic key (K'), - comparing (52) the detected watermark to an expected watermark, and authenticating the computer-aided manufacturing of said three-dimensional part in case of a positive comparison.

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Citation (search report)
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