

Title (en)

ASCERTAINING PROPERTY VALUES OF A SEGMENT OF A MANUFACTURED PRODUCT MADE OF MULTIPLE LAYERS OF A CONSTRUCTION MATERIAL

Title (de)

ERMITTLUNG VON EIGENSCHAFTSWERTEN EINES SEGMENTS EINES AUS MEHREREN SCHICHTEN EINES AUFBAUMATERIALS AUFGEBAUTEN FERTIGPRODUKTS

Title (fr)

DÉTERMINATION DE VALEURS DE PROPRIÉTÉS D'UN SEGMENT D'UN PRODUIT MANUFACTURÉ CONSTITUÉ DE PLUSIEURS COUCHES D'UN MATÉRIAU DE CONSTRUCTION

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Application

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Abstract (en)

[origin: WO2023006485A1] The invention relates to a method and a device (70) for ascertaining property values of a segment (SG, SG1, SG2, SG3) of a manufactured product (2, 2', 2''), which is made of multiple layers (L, L1, L2, L3, L4) of a construction material (13), of an additive manufacturing process. In the process, a parameter set (PS, PS') is ascertained which comprises a defined group of process parameter values for the construction process of at least one layer (L, L1, L2, L3, L4) of the segment (SG, SG1, SG2, SG3). At least one process parameter value comprises a layer scanning direction arrangement (HS2, HS3). Furthermore, at least one segment scanning direction distribution (SSV) is ascertained for the construction process of the segment (SG, SG1, SG2, SG3). A macroproperty value (MWA) of the segment is ascertained on the basis of the parameter set (PS) and the segment scanning direction distribution (SSV). The invention additionally relates to a method and a testing device (80) for testing a manufactured product (2, 2', 2''), to a control data generating device (54, 54') which comprises such a testing device (80), to a control device (50) for a production device (1), said control device comprising such a control data generating device (54, 54'), and to a production device (1). The invention also relates to a method for setting up a basic property database (EDB) and to a property database system (DBS) comprising such a basic property database (EDB).

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