

Title (en)  
METHOD, COMPUTER-READABLE DATA CARRIER, COMPUTER PROGRAM, AND SIMULATOR FOR DETERMINING STRESSES AND SHAPE DEVIATIONS IN AN ADDITIVELY PRODUCED CONSTRUCTION

Title (de)  
VERFAHREN, COMPUTERLESBARER DATENTRÄGER, COMPUTERPROGRAMM UND SIMULATOR ZUM ERMITTELN VON SPANNUNGEN UND FORMABWEICHUNGEN IN EINER ADDITIV HERGESTELLTEN BAUSTRUKTUR

Title (fr)  
MÉTHODE, SUPPORT LISIBLE PAR ORDINATEUR, PROGRAMME INFORMATIQUE ET SIMULATEUR PERMETTANT DE DÉTERMINER DES ÉCARTS DE TENSION ET DE FORME DANS UNE STRUCTURE DE BÂTIMENT FABRIQUÉE DE MANIÈRE ADDITIVE

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Application  
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Abstract (en)  
[origin: WO2017174160A1] The invention relates to a method for determining production-related shape deviations (el,i) and stresses in a construction (11) produced by means of an additive production method, which construction is produced by solidifying construction material in successive layers (12). The invention further relates to a use of said method to produce corrected production data (19) and to the application of said production data in an additive production system. The invention further relates to a computer-readable data carrier and to a computer program for performing said method and to a simulation in which such a computer program can run. In the method, superlayers (13) are used in order to reduce the computational complexity of the simulation. According to the invention, in order to ensure a simulation result of sufficient accuracy with justifiable computational complexity, effective shrinkage factors (ai or al,i) are determined for the solidified construction material in order to calculate the effective thermal shrinkage (el or el,i) in each superlayer (13).

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Cited by  
EP3411233A4; WO2017136206A1

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