

Title (en)

METHOD FOR PROVIDING A MODEL FOR AT LEAST ONE MACHINE, TRAINING SYSTEM, METHOD FOR SIMULATING AN OPERATION OF A MACHINE, AND SIMULATION SYSTEM

Title (de)

VERFAHREN ZUM BEREITSTELLEN EINES MODELLS FÜR ZUMINDEST EINE MASCHINE, TRAININGSSYSTEM, VERFAHREN ZUM SIMULIEREN EINES BETRIEBS EINER MASCHINE SOWIE SIMULATIONSSYSTEM

Title (fr)

PROCÉDÉ POUR LA FOURNITURE D'UN MODÈLE POUR AU MOINS UNE MACHINE, SYSTÈME DE FORMATION, PROCÉDÉ POUR LA SIMULATION D'UN FONCTIONNEMENT D'UNE MACHINE AINSI QUE SYSTÈME DE SIMULATION

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Application

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Abstract (en)

[origin: WO2020169363A1] The invention relates to a method for providing a model (MA, MA,B) for at least one machine (A, B), in particular a machine tool, the operation of the machine (A) being controlled by means of a controller device (2), said method having the steps of: - receiving a chronological series of measured values (XA), the measured values (XA) describing an operating variable of the machine (A), - providing an untrained model (MU) in the form of an artificial neural network, - training the untrained model (MU) using the measured values (XA) received, and - determining derived controlled variables (Θ'A) which describe the controller device (2) by means of the trained model (MA), wherein a chronological series of measured values (XB) of a further machine (B), the operation of which is controlled using a further controller device (2'), are received, wherein the machine (A) and the further machine (B) are different types of machines (A, B), and the trained model (MA) is trained further by means of transfer learning using the measured values (XB) of the further machine (B).

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