

Title (en)

MACHINE CONTROLLER AND METHOD FOR CONFIGURING THE MACHINE CONTROLLER

Title (de)

MASCHINENSTEUERUNG SOWIE VERFAHREN ZUM KONFIGURIEREN DER MASCHINENSTEUERUNG

Title (fr)

DISPOSITIF DE COMMANDE DE MACHINE ET PROCÉDÉ DE CONFIGURATION DU DISPOSITIF DE COMMANDE DE MACHINE

Publication

EP 4295199 A1 20231227 (DE)

Application

EP 22716064 A 20220317

Priority

- EP 21166569 A 20210401
- EP 2022057081 W 20220317

Abstract (en)

[origin: WO2022207353A1] In order to configure a machine controller (CTL) for a machine (M), a plurality of state signals (ZS) of a first state space (S1) is read in, each state signal being assigned an optimized control signal (AS). Using the plurality of state signals (ZS), a first signal converter (T1) is trained to convert state signals (ZS) from the first state space (S1) into a second state space (S2) which is dimension-reduced in comparison with the first state space, the state signals thus being converted into reduced state signals (ZSR), wherein the loss of information is minimized. Furthermore, a second signal converter (T2) is trained, by the composing of a conversion (R) from discrete rule elements (+, *, EXP,...), to reproduce corresponding optimized control signals (AS) by converting reduced state signals (ZSR) by means of the conversion rule (R). Thus, the machine controller (CTL) is designed to convert a state signal (ZS) of the machine (M) into a reduced state signal (ZSR) by means of the trained first signal converter (T1) and to convert said reduced state signal into an optimized control signal (AS) by means of the trained second signal converter (T2), said optimized control signal being used to control the machine (M).

IPC 8 full level

G05B 13/02 (2006.01); **G05B 17/02** (2006.01)

CPC (source: EP US)

G05B 13/0265 (2013.01 - EP US); **G05B 17/02** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4068011 A1 20221005; CN 117157592 A 20231201; EP 4295199 A1 20231227; US 2024176310 A1 20240530;
WO 2022207353 A1 20221006

DOCDB simple family (application)

EP 21166569 A 20210401; CN 202280026020 A 20220317; EP 2022057081 W 20220317; EP 22716064 A 20220317;
US 202218552514 A 20220317