

Title (en)
METHOD FOR CONTROLLING MECHANISMS AND TECHNICAL SYSTEMS, A CORRESPONDING DEVICE AND CONTROL SOFTWARE

Title (de)
ZUSTANDSSTEUERUNG VON TECHNISCHEN SYSTEMEN

Title (fr)
PROCEDE POUR REGULER DES MECANISMES ET DES SYSTEMES TECHNIQUES, DISPOSITIF ET LOGICIEL DE COMMANDE APPROPRIES

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Application
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Abstract (en)
[origin: WO0175535A2] The invention relates to a method for controlling mechanisms or technical systems, whereby the mechanisms or technical systems to be controlled are, in the elementary functions (8) thereof, stored in a controller with their states, which are defined in an instruction-appropriate manner, and with the associated signal formers of the sensors (13) and actuators (12). When initiated, a new instruction that changes the state of the mechanisms or of the technical system updates the specified state (24) for the comparison and, based on permissible transition times that are also stored, monitors the time till the acknowledgment of the instruction-appropriate new state. In addition, sensor signals and comparable information exclusively serve the state identification of elementary functions (8), state changes exclusively ensue upon the initiation of elementary instructions (16) to which the sensor and actuator signals are assigned as the specified state, and the utilization instructions (32) freely defined at the logic-functional language level are defined by the corresponding assignment of elementary instructions (16).
[origin: WO0175535A2] The invention relates to a method for controlling mechanisms or technical systems which is characterized in that: (a) the mechanisms or technical systems to be controlled are, in the elementary functions (8) thereof, stored in a controller with their states, which are defined in an instruction-appropriate manner, and with the associated signal formers of the sensors (13) and actuators (12), whereby starting from a defined reference state (18) at the onset of the activation of the controller, the actual states signaled by the technical system via the sensors (13) are continuously compared with the specified state (24) for all elementary functions, said specified state being stored in the controller, and, based on this comparison, every deviation from the instruction-appropriate specified state (24) is identified in the system to be controlled, and; (b) when initiated, a new instruction that changes the state of the mechanisms or of the technical system updates the specified state (24) for the comparison and, based on permissible transition times that are also stored, monitors the time till the acknowledgment of the instruction-appropriate new state, and; (c) sensor signals and comparable information exclusively serve the state identification of elementary functions (8), state changes exclusively ensue upon the initiation of elementary instructions (16) to which the sensor and actuator signals are assigned as the specified state, and the utilization instructions (32) freely defined at the logic-functional language level are defined by the corresponding assignment of elementary instructions (16). The invention also relates to a device for implementing said method and to a method for writing the control software.

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