

Title (en)

ADAPTIVE TWO-POSITION CONTROLLER AND METHOD FOR ADAPTIVE TWO-POSITION CONTROL

Title (de)

ADAPTIVER ZWEIPUNKTREGLER UND VERFAHREN ZUR ADAPTIVEN ZWEIPUNKTREGELUNG

Title (fr)

RÉGULATEUR ADAPTATIF À DEUX POSITIONS ET PROCÉDÉS DE RÉGULATION ADAPTATIVE À DEUX POSITIONS

Publication

EP 3811161 A1 20210428 (DE)

Application

EP 19730323 A 20190611

Priority

- DE 102018004989 A 20180625
- EP 2019065215 W 20190611

Abstract (en)

[origin: WO2020001974A1] The invention relates to a method for the two-position control of an actuator (1) on the basis of a binary sensor signal (y) of a sensor unit (2), which senses a process variable (P), which can be influenced by the actuator (1), in such a way that the sensor unit outputs a first sensor signal value (y1) when a first switching value (Sw1) is exceeded and a second sensor signal value (y0) when a second switching value (Sw1, Sw2) is fallen below, wherein: the actuator (1) is controlled with a manipulated variable (u), which assumes either a first control value (u1) or a second control value (u2); the first control value (u1) and the second control value (u2) are dynamically adapted during the operation of the actuator (1), in dependence on a fall time (t_{fall}) corresponding to the duration of the first sensor signal value (y1) and a rise time (t_{rise}) corresponding to the duration of the second sensor signal value (y0), in such a way that the first and second control values converge. The invention further relates to a two-position controller (10) designed to carry out the method and to an actuator (1) comprising said two-position controller (10).

IPC 8 full level

G05B 13/02 (2006.01); **G05B 11/16** (2006.01)

CPC (source: EP US)

G05B 13/0245 (2013.01 - EP US)

Citation (search report)

See references of WO 2020001974A1

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

DOCDB simple family (publication)

DE 102018004989 B3 20190912; EP 3811161 A1 20210428; US 11733658 B2 20230822; US 2021247725 A1 20210812; WO 2020001974 A1 20200102

DOCDB simple family (application)

DE 102018004989 A 20180625; EP 19730323 A 20190611; EP 2019065215 W 20190611; US 201917054276 A 20190611