

Title (en)

METHOD AND ARRANGEMENT FOR CORRECTING POSITIONAL ERRORS OF A KINEMATIC SYSTEM, CORRESPONDING COMPUTER PROGRAM AND CORRESPONDING COMPUTER-READABLE STORAGE MEDIUM

Title (de)

VERFAHREN UND ANORDNUNG ZUR KORREKTUR VON POSENFEHLERN EINER KINEMATIK SOWIE EIN ENTSPRECHENDES COMPUTERPROGRAMM UND EIN ENTSPRECHENDES COMPUTERLESBARES SPEICHERMEDIUM

Title (fr)

PROCÉDÉ ET ENSEMBLE DE CORRECTION D'ERREURS DE POSE D'UN SYSTÈME CINÉMATIQUE AINSI QUE PROGRAMME D'ORDINATEUR CORRESPONDANT ET SUPPORT D'ENREGISTREMENT CORRESPONDANT LISIBLE PAR ORDINATEUR

Publication

EP 2983869 A1 20160217 (DE)

Application

EP 14707339 A 20140204

Priority

- DE 102013101095 A 20130204
- EP 2014052150 W 20140204

Abstract (en)

[origin: WO2014118387A1] The invention relates to a method and an arrangement for calibrating a kinematic system and to a corresponding computer program and corresponding computer-readable storage medium, which method, arrangement, computer program and storage medium can be used, in particular, to extend calibration to classes of parallel and serial robot kinematic systems which have not been constructed specially for achieving maximum accuracy levels but which preferably have a high level of reproducibility. For this reason, a method is proposed which comprises the following steps: - moving the kinematic system in such a way that the kinematic system assumes a number of positions with predefinable accuracy, - determining first configuration vectors by evaluating data describing the actuator deflections in the assumed positions, - determining a function for transforming the configuration space by evaluating the first and second configuration vectors, wherein the second configuration vectors are each mapped onto one of the positions by means of an actuation function, and - defining a calibrated actuation function on the basis of successive execution of firstly the function for transforming the configuration space and subsequently the actuation function.

IPC 8 full level

B25J 9/16 (2006.01)

CPC (source: EP US)

B25J 9/1692 (2013.01 - EP US); **G05B 2219/39017** (2013.01 - EP US); **G05B 2219/39018** (2013.01 - EP US)

Citation (search report)

See references of WO 2014118387A1

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 102013101095 A1 20140807; **DE 102013101095 B4 20161215**; CN 105705302 A 20160622; CN 105705302 B 20190604; EP 2983869 A1 20160217; US 2016346931 A1 20161201; WO 2014118387 A1 20140807

DOCDB simple family (application)

DE 102013101095 A 20130204; CN 201480020158 A 20140204; EP 14707339 A 20140204; EP 2014052150 W 20140204; US 201615228855 A 20160804