Title (en)

METHOD AND DEVICE FOR DEFINING A MOVEMENT SEQUENCE FOR A ROBOT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM FESTLEGEN EINES BEWEGUNGSABLAUFS FÜR EINEN ROBOTER

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE DÉFINIR UNE SÉQUENCE DE DÉPLACEMENT D'UN ROBOT

Publication

EP 3449325 A1 20190306 (DE)

Application

EP 17718911 A 20170421

Priority

- DE 102016004841 A 20160424
- EP 2017059570 W 20170421

Abstract (en)

[origin: WO2017186601A1] The present invention relates to a method and to a device for defining a movement sequence for a multi-axis manipulator (M) of a robot system, which manipulator (M) has a plurality of elements (G) which form different rotational axes, and an end element for interaction with an effector (E), wherein the effector (E) is intended to carry out at least one arbitrary operation in a working space (R), and wherein in order to carry out the at least one arbitrary operation the end element of the manipulator (M) is to be transferred into an arbitrary target pose (xi) with respect to the working space (R), wherein the manipulator (M) moves in a plurality of steps (Si;Sj) to the target pose (xi) while approaching the end element, and for each step (Si; Sj) at least one defined impedance pattern (Kx) and/or admittance pattern is defined with respect to at least one axis (AA;AG;AE;AR) which forms the axis (AA;AG;AE;AR) of a coordinate system (CA;CG;CE;CR) which is linked to the manipulator (M).

IPC 8 full level

G05B 19/423 (2006.01); **B25J 9/16** (2006.01)

CPC (source: EP KR US)

B25J 9/163 (2013.01 - US); **B25J 9/1664** (2013.01 - EP KR US); **G05B 19/423** (2013.01 - EP KR US); G05B 2219/35478 (2013.01 - EP KR US); G05B 2219/36432 (2013.01 - EP KR US); G05B 2219/39001 (2013.01 - US); G05B 2219/40387 (2013.01 - EP KR US)

Citation (search report)

See references of WO 2017186601A1

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 102016004841 A1 20171026; **DE 102016004841 B4 20180104**; CN 109313436 A 20190205; EP 3449325 A1 20190306; JP 2019514705 A 20190606; KR 20190032280 A 20190327; SG 11201809340W A 20181228; US 2019168383 A1 20190606; WO 2017186601 A1 20171102

DOCDB simple family (application)

DE 102016004841 A 20160424; CN 201780038800 A 20170421; EP 17718911 A 20170421; EP 2017059570 W 20170421; JP 2018555594 A 20170421; KR 20187034085 A 20170421; SG 11201809340W A 20170421; US 201716095622 A 20170421