

Title (en)

METHOD AND FACILITY FOR COMPOSING A BATCH OF PARTS FROM PARTS SITUATED IN DIFFERENT STORAGE AREAS

Title (de)

VERFAHREN UND ANLAGE ZUR ZUSAMMENSTELLUNG EINES CHARGE VON TEILEN AUS TEILEN IN VERSCHIEDENEN LAGERBEREICHEN

Title (fr)

PROCEDE ET INSTALLATION PERMETTANT DE CONSTITUER UN LOT DE PIECES A PARTIR DE PIECES SITUEES DANS DES ZONES DE STOCKAGE DIFFERENTES

Publication

EP 3383597 A1 20181010 (FR)

Application

EP 16819347 A 20161202

Priority

- FR 1561769 A 20151203
- FR 2016053178 W 20161202

Abstract (en)

[origin: WO2017093683A1] Method for automatically composing, by means of a polyarticulated system (7) subject to at least one vision system (2), at least one batch of parts (6) in a receiving area (10) from parts situated in at least two different storage areas (5, 13), said polyarticulated system comprising at least two distinct gripping members, each able to grasp a part (6) by at least one specific grip area. According to the invention, the method comprises at least the stages consisting of: - automatically moving the polyarticulated system (7) to a first storage area (5, 13) and of: (i) capturing an image of the storage area (5, 13) by means of the vision system (2); (ii) processing the resulting information from the image and identifying all the grip areas of the parts (6) that are compatible with the gripping members; (iii) locating, in position and orientation, the identified grip areas; (iv) selecting the grip area which has the greatest chance of being grasped by a gripping member and which has no collision constraint, and automatically calculating, for said corresponding gripping member, a path for gripping the part by the selected grip area; (v) grasping the corresponding part (6) following the calculated path, and automatically moving the polyarticulated system (7) to the receiving area (10) to deposit said part (6) there; - automatically moving the polyarticulated system (7) to a second storage area (5, 13) and repeating steps (i) to (v).

IPC 8 full level

B25J 9/16 (2006.01)

CPC (source: EP)

B25J 9/1687 (2013.01); **G05B 2219/39473** (2013.01); **G05B 2219/39536** (2013.01); **G05B 2219/39553** (2013.01); **G05B 2219/40013** (2013.01); **G05B 2219/40053** (2013.01); **G05B 2219/45063** (2013.01)

Citation (examination)

R. DETRY ET AL: "Abstract", PALADYN, JOURNAL OF BEHAVIORAL ROBOTICS, vol. 2, no. 1, 1 January 2011 (2011-01-01), pages 1 - 17, XP055692969, DOI: 10.2478/s13230-011-0012-x

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)

WO 2017093683 A1 20170608; EP 3383597 A1 20181010; FR 3044573 A1 20170609; FR 3044573 B1 20171222; JP 2019501033 A 20190117

DOCDB simple family (application)

FR 2016053178 W 20161202; EP 16819347 A 20161202; FR 1561769 A 20151203; JP 2018548287 A 20161202