

Title (en)
METHOD FOR AUTOMATICALLY PERFORMING AN OPERATION ON AN OBJECT WITH A TOOL CARRIED BY A POLYARTICULATED SYSTEM

Title (de)
VERFAHREN ZUR AUTOMATISCHEN DURCHFÜHRUNG EINER OPERATION AN EINEM OBJEKT MIT EINEM VON EINEM MEHRGELENKIGEN SYSTEM GETRAGENEN WERKZEUG

Title (fr)
PROCÉDÉ DE RÉALISATION AUTOMATIQUE D'UNE OPÉRATION SUR UN OBJET AVEC UN OUTIL PORTÉ PAR UN SYSTÈME POLYARTICULÉ

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Application
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Abstract (en)
[origin: WO2021181035A1] The invention relates to a method and an apparatus for automatically performing an operation on an object (2) with a tool (4) carried by a polyarticulated system (5) that can be moved in a working environment (3), the object (2) and the working environment (3) being open-ended or insufficiently defined to carry out the operation. According to the invention, the method comprises at least: - a step A which consists in capturing, in the form of a scatter plot, an image of the object (2) and of the working environment (3) with at least one 3D sensor (6), in merging this image with the CAD model of the polyarticulated system and with the possible CAD model of the environment into a working image, and in defining anti-collision parameters; - a step B which consists in defining a path of the tool (4) on the portion of the working image representing the object (2), and in executing a simulation of the corresponding movement of the polyarticulated system (5) and of the tool in the working image so as to ensure that the operation is feasible; - a step C which consists, if the operation is feasible according to step B, in executing the actual movement of the polyarticulated system (5) carrying the tool (4) according to the path (10) defined for performing the operation on the object (2).

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