

Title (en)

METHOD FOR MOTION SIMULATION OF A MANIPULATOR

Title (de)

VERFAHREN ZUR BEWEGUNGSSIMULATION EINES MANIPULATORS

Title (fr)

PROCÉDÉ DE SIMULATION DE MOUVEMENT POUR UN MANIPULATEUR

Publication

EP 3227061 A1 20171011 (DE)

Application

EP 15805157 A 20151203

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- EP 2015078533 W 20151203

Abstract (en)

[origin: WO2016087590A1] The invention relates to a method for motion simulation of a manipulator (1a,b), preferably a NC-controlled manipulator (1a,b), in a processing environment (3a,b), wherein the manipulator (1a,b) is moved in a working operation by a control device (10) and the processing environment (3a,b) is at least partially mapped in a model of the environment, said method comprising the steps of calculating a path planning (12a,b) by the control device (10) from a desired movement of the manipulator (1a,b) starting from an initial position (11a,b) and on the basis of a kinematic model of the manipulator (1a,b), carrying out a kinematic collision test on the basis of the path planning (12a,b), the kinematic model and the model of the environment, and generating a prediction result on the basis of the kinematic collision test. The method is characterized in that the initial position (11a,b) corresponds to the current state of the manipulator. The invention further relates to a corresponding computer program having a program code and to a corresponding system for motion simulation of a manipulator (1a,b).

IPC 8 full level

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Cited by

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