

Title (en)

FORCE LIMITATION IN THE EVENT OF COLLISION OF A ROBOT MANIPULATOR

Title (de)

KRAFTBEGRENZUNG BEI KOLLISION EINES ROBOTERMANIPULATORS

Title (fr)

LIMITATION DE FORCE EN CAS DE COLLISION D'UN ROBOT MANIPULATEUR

Publication

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Application

**EP 21709343 A 20210210**

Priority

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Abstract (en)

[origin: WO2021160635A1] The invention relates to a method for a robot manipulator (1), having the following steps: - specifying (S1) a maximum permissible force to be exerted on an object (3) by the robot manipulator (1), - specifying (S2) a target position (5) of a reference point (7) of the robot manipulator (1), - determining (S3) a current position of the reference point (7), - executing an impedance control operation that determines a current reference force of an artificial spring component on the basis of a spring stiffness and the difference between the current position and the specified target position (5) of the reference point (7) of the robot manipulator (1), and - actuating (S5) the robot manipulator (1) so as to execute an emergency control program when the current reference force exceeds the specified maximum permissible force.

IPC 8 full level

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CPC (source: EP KR US)

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