

Title (en)
CONTROL METHOD FOR A ROBOT

Title (de)
STEUERVERFAHREN FÜR EINEN ROBOTER

Title (fr)
PROCÉDÉ DE COMMANDE POUR UN ROBOT

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Application
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Abstract (en)
[origin: WO2013026554A1] The invention relates to a control method for a robot (1) having a plurality of movable robot axes (2, 4, 6), in particular for a painting robot (1) or a manipulating robot, comprising the following steps: (a) predetermining a robot path by means of a plurality of path points through which a reference point of the robot (1) is intended to travel; (b) controlling drive motors of the individual robot axes (2, 4, 6) according to the predetermined robot path, such that the reference point of the robot (1) travels through the predetermined robot path; (c) precalculating the mechanical loading (My1, Mx1, Fx1, Fy1, Fz1, Fx2, Fy2, Fz2, Mx2, My2, Mz2) that occurs within at least one of the robot axes (2, 4, 6) between two joints when travelling through the robot path ahead; and also (d) adjusting the control of the drive motors of the robot axes (2, 4, 6) on the basis of the precalculated mechanical loading (My1, Mx1, Fx1, Fy1, Fz1, Fx2, Fy2, Fz2, Mx2, My2, Mz2), such that a mechanical overload is avoided.

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