

Title (en)
REDUNDANCY RESOLUTION FOR A REDUNDANT MANIPULATOR

Title (de)
REDUNDANZAUFÖSUNG FÜR EINEN REDUNDANTEN MANIPULATOR

Title (fr)
RÉSOLUTION REDONDANTE POUR MANIPULATEUR REDONDANT

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Abstract (en)
[origin: WO2018010842A1] The invention relates to a method for controlling a redundant manipulator (10), wherein the manipulator (10) has a plurality of movement axes (A1 - A7) and the method comprises the following steps: determining a primary task for controlling the manipulator (1), wherein the primary task comprises the traveling along a movement path (30) of the manipulator (10); determining at least one secondary task for controlling the manipulator (10), wherein the secondary task comprises the reducing of the effective mass (μ) and/or the effective inertia (I_u); calculating n alternatives of possible axis angles ($\alpha_1 - \alpha_7$) of the movement axes (A1 - A7) of the manipulator (10) for performing the primary task, and calculating the axis angular velocities for the n alternatives; and controlling the manipulator (10) while taking into consideration the n alternatives and the secondary task.

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