

Title (en)
PARALLEL ROBOT WITH TWO DEGREES OF FREEDOM HAVING TWO KINEMATIC CHAINS WITH MAXIMIZED FLEXURE STIFFNESS

Title (de)
PARALLELROBOTER MIT ZWEI FREIHEITSGRADEN MIT ZWEI KINEMATISCHEN KETTEN MIT MAXIMIERTEFR STEIFIGKEITSBIEGUNG

Title (fr)
ROBOT PARALLELE A DEUX DEGRES DE LIBERTE PRESENTANT DEUX CHAINES CINEMATIQUES DONT LA RAIDEUR EN FLEXION EST MAXIMISEE

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Application
EP 11785671 A 20111121

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Abstract (en)
[origin: WO2012069430A1] The invention relates to a parallel robot consisting of two kinematic chains (1, 2) connecting a base (3) to a platform (4) which is intended to be moved relative to the base, said robot comprising only two degrees of freedom such that the platform can be moved relative to the base in a plane (x, z) of a space (x, y, z) in which the x, y, and z directions are orthogonal, wherein the kinematic chains each include a bend (11) connecting a proximal sub-chain (10) connected to the base and a distal sub-chain (12) connected to the platform, said proximal sub-chain being intended to drive the bend in translation in the (x, z) plane, characterized in that the distal sub-chain of at least one of the two kinematic chains includes two rods (120, 121) spaced from each other in the (y) direction, a first end of each rod being connected to said bend by a link system consisting of two pivots (50, 51, 60, 61) having mutually orthogonal axes, wherein the axes of the two pivots (50, 51) of the link system of one of the rods (120) each define a non-zero angle with the axes of the two pivots (60, 61) of the link system of the other rod (121), the second end of each rod being connected to said platform by a link system also consisting of two pivots (52, 53, 62, 63) having mutually orthogonal axes, wherein the axes of the two pivots (52, 53) of the link system of one of the rods (120) each define a non-zero angle with the axes of the two pivots (62, 63) of the link system of the other rod (121).

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Citation (search report)
See references of WO 2012069430A1

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