Title (en)

DEVICE AND METHOD FOR DETERMINING, IN AT LEAST THREE SPATIAL DIRECTIONS, A FORCE ACTING ON A BODY, AND METHOD FOR CONTROLLING THE MOVEMENT OF A BODY

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERMITTLUNG EINER AUF EINEN KÖRPER WIRKENDEN KRAFT IN WENIGSTENS DREI RAUMRICHTUNGEN UND VERFAHREN ZUR ANSTEUERUNG DER BEWEGUNG EINES KÖRPERS

Title (fr)

DISPOSITIF ET PROCÉDÉ DE DÉTERMINATION, DANS AU MOINS TROIS DIRECTIONS SPATIALES, D'UNE FORCE AGISSANT SUR UN CORPS, ET PROCÉDÉ DE CONTRÔLE DU MOUVEMENT D'UN CORPS

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Application

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Abstract (en)

[origin: WO2022069224A1] The invention relates to a device for determining, in at least three spatial directions (Fx, Fy, Fz, Mx, My, Mz), a force acting on a body (3), in particular a manipulator, the device comprising: - at least one sensor element (1, 2) to be mounted on the surface (3.1) of the body (3), which element comprises at least three individual sensor elements (1.3), wherein each individual sensor element (1.3) is designed to determine an individual force in one direction, or which element comprises at least one individual sensor element (1.3) which is designed to determine an individual force in three spatial directions; - and an evaluation/control unit (6) which detects the individual force determined by each individual sensor element (1.3) and which is designed to calculate, in at least three spatial directions (Fx, Fy, Fz, Mx, My, Mz), the force acting on the sensor element (1, 2), by projecting the individual forces onto a virtual point (1.2, 2.2) of the sensor element (1, 2). The invention also relates to a method for determining, in at least three spatial directions, a force acting on a body (3), and to a method for controlling the movement of a body (3).

IPC 8 full level

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