

Title (en)

ROBOT GRIPPER, AND METHOD FOR OPERATING A ROBOT GRIPPER

Title (de)

ROBOTERGREIFER SOWIE VERFAHREN ZUM BETRIEB EINES ROBOTERGREIFERS

Title (fr)

PRÉHENSEUR DE ROBOT ET PROCÉDÉ POUR FAIRE FONCTIONNER UN PRÉHENSEUR DE ROBOT

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Application

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Abstract (en)

[origin: WO2020193340A1] The invention relates to a robot gripper (100) and to a method for operating such a robot gripper (100). The robot gripper (100) comprises: at least one drive unit AE (101) for driving a powertrain AS (102) with a number N of active elements WEn (103), wherein each active element WEn (103) has a working region ABn which is arranged in a body-fixed manner relative to the robot gripper, in which each active element WEn can be moved, and which can be reached by each active element; a control unit (104) for controlling the at least one drive unit AE (101); and a sensor system (105) that is connected to the control unit (104) for ascertaining forces/moments Fext,WEn(t), where n = 1, 2, ..., N and N ≥ 1, which are applied externally to the individual active elements WEn (103). The control unit (104) is designed such that a collision monitoring process can be carried out for the active elements WEn (103), and in the event of a detected collision event for an active element WEn (103), the drive unit AE (101) is actuated according to a specified operation, having the following steps: providing (201) a defined region Bn within the working region ABn for each active element WEn; carrying out (202) the collision monitoring process for the active elements WEn (103) only if the respective active element WEn (103) is located outside of the assigned region B; and deactivating the collision monitoring process for the active elements WEn when the respective active element WEn is located at least partly within the assigned region Bn.

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