

Title (en)

TORQUE TRANSMISSION DEVICE, ACTUATOR, AND ROBOT

Title (de)

DREHMOMENTÜBERTRAGUNGSVORRICHTUNG, AKTOR, ROBOTER

Title (fr)

DISPOSITIF DE TRANSMISSION DE COUPLE, ACTIONNEUR, ROBOT

Publication

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Application

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Abstract (en)

[origin: WO2014139702A1] The invention relates to a torque transmission device (3), the stiffness of which can be variably adjusted, to an actuator (1) having such a torque transmission device (3), and to a robot (26). The torque transmission device (3) according to the invention has an inner ring (5), an outer ring (4) that is arranged as to be rotatable to the inner ring (5) from a neutral position (25) in a positive rotational direction (17) or a negative rotational direction (18) to the inner ring, at least one pair of receiving bellows (9, 10), comprising a positive receiving bellows (9) and a negative receiving bellows (10), at least one gas pressure spring (13), and an adjusting unit connected to the at least one gas pressure spring (13). The receiving bellows (9, 10) are arranged between the outer ring (4) and the inner ring (5) in such a way that when the inner ring (5) is rotated in the positive rotational direction (17), the positive receiving bellows (9) can be compressed, and when the inner ring (5) is rotated in the negative rotational direction (18), the negative receiving bellows (10) can be compressed. In addition, the receiving bellows (9, 10) are connected to the at least one gas pressure spring (13) in a fluidically conductive manner.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

See references of WO 2014139702A1

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DOCDB simple family (publication)

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