



ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

Attuatore per esoscheletro

INVENTORS

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DESCRIPTION

This invention is in the area of human robot interaction within the field of wearable robotics and is on the development of actuation solutions for exoskeletal systems. Typical robotic actuation units have a motor and its transmission system aligned with the axis of the joint they actuate, resulting in large lateral encumbrance of the whole system.

This solution aims at solving this problem and allows to locate the last transmission stage at an arbitrary distance from the axis of the screw. This increases the degrees of freedom in the design of a proper layout of the system, optimizing designs in which lateral encumbrance has to be minimized.



APPLICATIONS

Wearable Robotics, Robotics

KEYWORDS

Actuator, Linear actuator, Leadscrew, Ballscrew, Backdrivability, Transmission.

BIBLIOGRAPHIC DATA

Exoskeleton actuator

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