



ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

Elastic rotary actuator, particularly for robotic applications, and method for its control

INVENTORS

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DESCRIPTION

This rotary actuator embeds a flexible transmission system which allows the actuator to be safe (towards human and environment) and robust during interaction. The key features of this actuator are its high power density, and small size which allows the integration of this actuation approach within small scale systems.



APPLICATIONS

This solution finds application in all those systems which require direct interaction of the robot with the human and environment, e.g. service/entertainment/rehabilitation/human-centred robotics, exoskeletons and medical devices.

KEYWORDS

Actuator, robotics, human-centred robotics, compliant actuation

BIBLIOGRAPHIC DATA

1) Attuatore rotante elastico, particolarmente per applicazioni robotiche, e metodo per il suo controllo

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Applicants Fondazione Istituto Italiano di Tecnologia

2) Elastic rotary actuator, particularly for robotic applications, and method for controlling the same

Application Number EP2239479

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Applicants Fondazione Istituto Italiano di Tecnologia

3) Elastic rotary actuator, particularly for robotic applications, and method for controlling the same

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