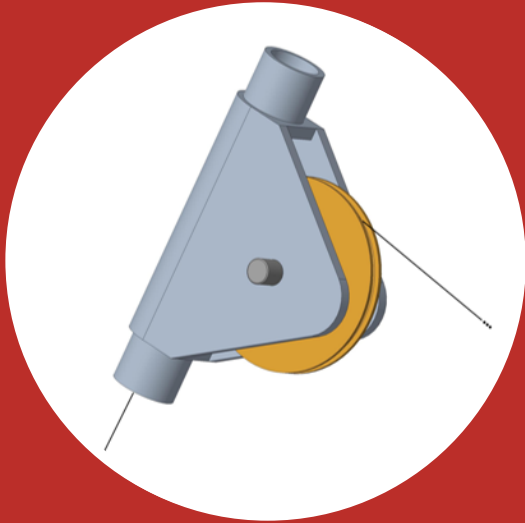


CABLE-DRIVEN PARALLEL ROBOT

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The present invention relates to a planar architecture cable robot suitable for industrial applications not requiring the contact of the end-effector with the surrounding environment. The device comprises of a mechanical part and an electronic part being in constant dialogue with each other.

Protection: Italy (with possibility to extend internationally)

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INVENTION

The use of cable manipulators, which are basically versatile and reconfigurable systems, brings about some issues limiting its deployment in industry. The patented device has been designed so that its control is as simple as possible to make it appealing for a large number of application fields. More specifically, the system consists of a flat rectangular workspace varying in shape and size depending on assembly. Similarly to most cable robots, it is actuated by winches, while being equipped with force sensors. Its end-effector can reach high accelerations and, by varying the type of laser head on it, the robot is able to perform very different tasks.

ADVANTAGES

- High precision in wide surfaces treatment;
- Directions-free cables;
- Economic and energy savings when deploying the device;
- Easy transportation and configurability on site.

APPLICATIONS

- Surfaces' marking and decoration;
- Inspection by cameras;
- Restoration operations;
- Welding.

CONTACTS

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