EPFL-TTO



EPFL Innovation Park J CH-1015 Lausanne Switzerland +41 21 693 70 23 http://tto.epfl.ch/ Research Contact

Prof. Silvetro Micera +41 21 693 10 47 silvestro.micera@epfl.ch TTO Contact

Dr. Adam Swetloff +41 21 693 37037 adam.swetloff@epfl.ch

Licensing Opportunity

TTO - Technology Transfer Office

Intuitive teleoperation



Ref. Nr

6.1778

Keywords

Teloperation, robots, drone, AR/VR

Intellectual Property

WO 2019/244112 Al

Publications

PNAS July 31, 2018 "Datadriven body-machine interface for the accurate control of drones"

Date

22/10/2020

Wearable remote controller that learns how the user wants to control a distal Robot: example of sensor configuration on the body of an operator according to the invention, in which a first-person view as visual feedback is provided through a head-mounted display

Description

The teleoperation of robots can be challenging with current control interfaces, which rely on mappings between the operator's and the robot's actions.

The invention relies on a wearable remote controller that learns how the user wants to control a distal Robot.

The invention provides an intuitive, gesture-based control interface for real and simulated robots, which outperform a standard joystick in terms of learning time and steering abilities.

Advantages

- Intuitive and personalised control
- Precision and reactivity compared to standard solutions

Applications

- Robots, unmanned aerial vehicles/drones
- Gaming

Offering

Licensing and collaboration