

Endoscopic surgery robotic instrumentation

Modular Teleoperated Robotic System allowing the remote manipulation of endoscopic and surgical instruments

KEYWORDS

Robotic surgery
Mini-invasive
Endoscopic devices
Surgical instruments
NOTES

PATENTS

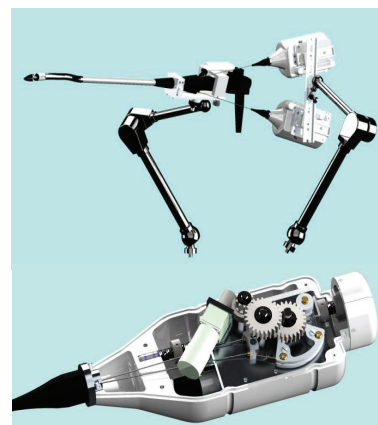
WO/2009/153438₁
(EP and US under
examination)
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TECHNOLOGY

- Master-slave robotic system for assistance of single-trocar-entry surgery
- 10 degrees of freedom
- Robotic system implemented through a computerized operating system and human-machine interfacing



APPLICATIONS

- Minimally invasive surgical procedures
- Instrument manipulation for medical as well as for industrial use

INNOVATION ADVANTAGES

- Only one surgeon needed for the intervention
- Allows the manipulation of three instruments simultaneously through the intuitive command interface
- Extensive number of possible operations: rotation, translation
- Easy to use and position

DEVELOPMENT STATUS

- Functional prototype tested by surgeons ex-vivo
- Improvement of the dedicated command interface and manipulation interface optimisation: ongoing
- Possibility to include a visual servoing system (WO/2002/113957)

