

## New magnetic endoscopic device for surgery

### Description:

In the field of surgery, it is extremely important to minimize the number and size of the incisions that are made for a given operation, since this results in less hospitalization time and less discomfort for the patient. Endoscopic surgery allows operations to be carried out through very small holes, through which a small camera and all the surgical instruments necessary for the operation are inserted. The present technology consists of a magnetic endoscopic device that allows the surgeon to handle a surgical instrument placed inside a cavity of the patient from outside the patient. Once the device is operational, the surgeon only has to adequately modify the orientations and / or the relative positions of the control magnets to handle the surgical instrument located inside the patient's cavity, being able not only to operate the instrument (for example, open or close tweezers or scissors) but also make it rotate or even move it out of position.

### Keywords:

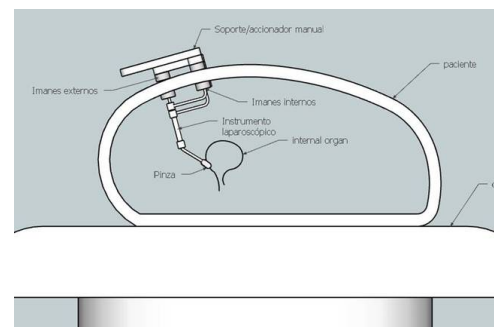
[Health](#), [Instrumentation](#), [Surgery](#)

### Sectors:

[Health](#)

### Areas:

[Health Sciences](#), [Instrumentation](#)



### Advantages:

The proposed device allows positioning, orienting and activating the surgical instrument to be used. Other of the most outstanding advantages are: - This new device is totally passive, so it does not require an external power supply or batteries, nor does it require the transmission of movement through the hole made in the patient. - It avoids the need for percutaneous punctures, which are an invasive method, constituting a more direct and intuitive system that is simple to use, low in cost, reusable and easily sterilized.

### Uses and Applications:

This technology is part of the field of medical instruments for application in surgery.

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