



## **TECHNOLOGY**

# Electrosurgical Element and Uterine Manipulator for Total Laparoscopic Hysterectomy

## **OVERVIEW**

During total laparoscopic hysterectomy (removal of the uterus and cervix by a minimally invasive method, TLH), separation of the uterus and the cervix from the vagina remains one of the most difficult and cumbersome steps of the procedure. This patent pending invention is a device that will simultaneously allow the surgeon to manipulate the uterus while performing laparoscopic colpotomy during TLH using one device. This invention comprises the uterine manipulator and electrosurgical element in one device.

## **APPLICATIONS**

According to the multiple published reports, more than 600,000 hysterectomies are performed annually in the United States alone. Close to 12% of those surgeries are done by a minimally invasive approach or laparoscopically, translating this into more 70,000 surgeries annually. With more advanced instrumentation and better training of the gynecologic surgeons, that number is expected to grow ever higher. Available instruments, however, do not address the issue of difficult and time-consuming separation of the uterus and the cervix from the vagina during total laparoscopic hysterectomy.

## **ADVANTAGES**

Provides desired surgical control of operating field. Increases patient's safety by minimizing surgical manipulation. Decreases the cost by eliminating the need for multiple surgical instruments

## **STAGE OF DEVELOPMENT**

A prototype with specific technical drawings has been conceived.

## **R&D REQUIRED**

Validation of the prototype in human cadavers and live subject is required.

## **LICENSING POTENTIAL**

UM seeks to develop and commercialize by an exclusive or non-exclusive license agreement and/or sponsored research with a company active in the area.

## **CONTACT INFO**

Office of Technology Transfer  
620 W Lexington St., 4th Floor  
Baltimore, MD 21201  
Email: [ott@umaryland.edu](mailto:ott@umaryland.edu)  
Phone: (410) 706-2380

## **Additional Information**

### **INSTITUTION**

University of Maryland, Baltimore

### **PATENT STATUS**

-Issued, Canada, No.2,766,548, Issued Date 07/28/2015 -Issued, US, No.9,033,977, Issued Date 05/19/2015 -Issued, UK, Spain, Italy, France and Germany, No. 2445435, issued date 08/23/2017

### **LICENSE STATUS**

Exclusively licensed

### **CATEGORIES**

- Devices
- Surgical devices

### **INVESTIGATOR(S)**

Vadim Morozov

VM-2009-082