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Redesigned vaginal speculum for enhanced patient comfort and physician use

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INVENTORS

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OTHER INFORMATION

CATEGORIZED AS

- » **Medical**
 - » Devices
 - » Disease: Infectious Diseases
 - » Disease: Women's Health
 - » Screening
- » **Sensors & Instrumentation**
 - » Medical

BRIEF DESCRIPTION

Researchers at UC Irvine have redesigned the vaginal speculum, a medical device routinely used for pap smears, and other medical procedures that involve inspection of the vaginal canal (i.e. IUD insertions, STD testing, and hysterectomies). The novel design addresses several patient discomforts associated with currently used speculums and is more time- and cost-effective for health professionals.

SUGGESTED USES

Medical device to be used for medical procedures involving the inspection of the cervix and/or vaginal canal.

FEATURES/BENEFITS

- Provides enhanced comfort for women undergoing medical procedures involving inspection of the vaginal canal
- Quieter
- More versatile in terms of size
- Enhanced inspection capabilities via fiber optic lighting
- Disposable outer sheath for effective sterilization between patients

TECHNOLOGY DESCRIPTION

A vaginal speculum is a medical device that is inserted into the vaginal canal during procedures that require vaginal inspection (e.g. pap smears, IUD insertions, STD testing, hysterectomies, and more). The current and widely-used vaginal speculum has a two blade duck-bill design in which one blade is stationary on the speculum handle and the other is operated using a thumb-activated lever, allowing for inspection of the vaginal canal by the healthcare provider. This centuries-old design has many problems such as lack of size versatility, hinged joints that may pinch, scrape, or damage vaginal tissue, uneven pressure between blades during open/close times, uncomfortable clicking noises, limited field of view for the provider, and difficulty of use for obese patients. Recently developed speculums have attempted to address these issues using a balloon-like tube but the design was difficult for physicians to incorporate and still very loud.

Faculty at UC Irvine have developed a novel vaginal speculum that addresses the issues associated with both speculums above. Designed as a cylindrical tube about the size of a tampon, the new device is operated using a rotatable handle and contains a soft and expandable outer sheath. This outer sheath is designed to be disposable, allowing for quick sterilization of the handle component for time reduction between patient visits. The cylindrical tube also contains a fiber optic cable at its base for lighting of the vaginal canal once inserted, allowing for more effective inspection by the healthcare provider. Furthermore, this innovative device is virtually silent. Altogether, the device eliminates the several sources of patient discomfort noted above and provides time, cost, and efficiency benefits for healthcare providers performing vaginal inspections.

STATE OF DEVELOPMENT

Finalized and working prototype

PATENT STATUS

Patent Pending

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