Flap Jack Surgical Retractor

ID# 2015-4335



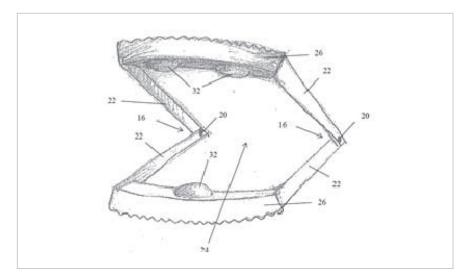


Diagram for Novel Skin Retractor

Technology Summary

The Flap Jack is a disposable, self-retaining surgical retractor that allows operation with a single hand. It is comprised of an upper and lower flat blade, interconnected by an expanding elastic design. It is inserted through incision into the breast pocket and advanced as dissection continues. Once inside the breast pocket, the lower blade rests on the anterior surface of the tissue overlying the rib cage, while the upper surface rests against the inside surface of the integument. The surgeon can access the inside of the breast pocket for dissection between these two blades, which continue to expand elastically for better visualization as more tissue is removed for the pocket. Compared to other retractors, this invention is highly adaptable, inexpensive, and disposable. This invention increases the efficiency of a surgeon's workflow, especially while operating in narrow cavities.

Application & Market Utility

Approximately 300,000 breast surgery procedures are performed annually in the US for treatment, reconstruction, and cosmetic indications. Mastectomies present a unique surgical challenge, especially regarding gaining access and achieving visibility for dissection within the breast pocket through the small incision. With about 238,000 mastectomies performed annually, there is a strong need for devices assisting improved methods in this procedure.

Next Steps

Seeking research collaboration and licensing opportunities.

TECHNOLOGY READINESS LEVEL

4-7

Seeking

Investment | Licensing | Research

Keywords

- Surgical Retractor
- Breast Surgery
- Mastectomy

Researchers

Rena Kass

Associate Professor, College of Medicine Website

Kristine Widders

Originating College

College of Medicine

Office of Technology Management Contact

Ritter, Dustin dwr18@psu.edu 814-863-7070



Invent Penn State is a Commonwealth-wide initiative to spur economic development, job creation, and student career success. Invent Penn State blends entrepreneurship-focused academic programs, business startup training and incubation, funding for commercialization, and university-community collaborations to facilitate the challenging process of turning research discoveries into valuable products and services that can benefit Pennsylvanians and humankind. Learn more at invent.psu.edu.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.