

Sterile Camera Cover for Photography/Video Recording in the Operating Room

TECHNICAL FIELD

Medical Device: Sterile camera cover

BACKGROUND

Photography and video recording procedures in a sterile environment such as an operating room is commonly done for the purpose of documentation and teaching. These activities should be performed while ensuring patient safety and obtaining accurate data under sterile condition. Ideally, if the surgeon obtains such images, the most accurate region of interest will be captured. However, this often entails changing sterile gloves and placing a non-sterile instrument over a surgically sterile field, hence potentially compromising the field and the patient. Alternatively, if non-surgical personnel performs such activities, the captured images may not be optimal and the integrity of the sterile field could be further compromised. A need exists for a sterile, hand-held photo/video camera which can be used to document surgical procedures accurately and safely. The current invention—a sterile, disposable covering for a photo/video camera—provides a good solution to this problem.



APPLICATIONS

Covering for photo/video camera used in sterile environments (i.e., an operating room).

ADVANTAGES

- Designed by a surgeon for surgeons
- A surgeon has complete control over data collection
- Increases efficiency
- Improves safety and sterility
- Convenient and disposable

INVESTIGATOR

Francesco T. Mangano, DO
Assistant Professor of Neurosurgery
Pediatric Neurosurgery
Cincinnati Children's Hospital Medical
Center, Cincinnati, Ohio

STATUS

Patent applications pending.

CONTACT

Korie Counts, PhD
Technology Manager
korie.counts@cchmc.org
513-636-6736

TECHNOLOGY

The present invention is a disposable covering that can be attached via a set of threaded lens adapters to a camera or camcorder in the operating room. The invention is for the purpose of creating a "sterile camera" for use when taking surgical or other necessary pictures around a sterile field. This would dramatically improve the safety and sterility concern of using non-covered / non-sterile cameras in the OR, which is done routinely by both surgical and non-surgical staff.

In addition, it would allow the surgeon to utilize the sterile camera without the necessity of scrubbing-out or directing another person in the OR to take pictures of the area(s) of interest. This would allow for more efficient and effective capture of the region(s) identified as important, since the surgeon would be capturing the images him/herself, and thus would not rely on another person's judgment, focus, etc. to provide an accurate representation of what was intended for optical capture. It is also envisioned that this sterile camera could be used for real-time assessment of the captured image by displaying the image on an in-room monitor.

Sterile Camera Cover for Photography/Video Recording in the Operating Room

THE INVENTOR

Francesco T. Mangano, DO
Pediatric Neurosurgeon
Assistant Professor of Neurosurgery

BACKGROUND

DO: Philadelphia College of Osteopathic Medicine (PCOM), Philadelphia, PA

Neurological Surgery Residency: NYCOM-Long Island Jewish Medical Center/North Shore University Health System, New Hyde Park, NY.

Fellowship in Pediatric Neurosurgery: Washington University School of Medicine, St. Louis Children's Hospital, St. Louis, MO



Most Recent Publications

Mangano, F.T.; Smyth, M.D. **Frameless, pinless stereotactic neurosurgery in children.** *J Neurosurg* 104 (6 Suppl Pediatrics): 392-395. **Letter to the Editor.** *Journal of Neurosurgery* (7 Suppl Pediatrics) 107:81-82, 2007.

Mangano, F.T.; Curt, B.; Mittler, M.A.; Valderama, E.; Schneider, S.J. **Astroblastoma: Review of the Literature and Analysis of Treatment Strategies: Case Report.** *Journal of Neurosurgical Sciences*, Vol. 51 N. 01: 21-28, 2007.

Smyth, M.D.; Limbrick, D.D.; Ojemann, J.G.; Zempel, J.; Robinson, S.; O'Brien, D.F.; Saneto, R.P.; Goyal, M.; Appleton, R.E.; Mangano, F.T.; Park, T.S. **Outcome following surgery for temporal lobe epilepsy in pre-adolescent children with hippocampal pathology: emphasis on mesial temporal sclerosis.** *Journal of Neurosurgery* (3 Suppl Pediatrics) 106:205-210, 2007.

Vadivelu, S.; Mangano, F.T.; Park, T.S.; Leonard, J.R.: **Multifocal Langerhans Cell Histiocytosis of the Pediatric Spine. A Case Report and Literature Review.** *Childs Nerv Syst*, September 20, 2006.

Johnston, J. Jr.; Mangano, F.T.; Ojemann, J.G.; Park, T.S.; Trevathan, E.; Smyth, M.D.: **Complications of invasive subdural grid and strip electrode monitoring at Saint Louis Childrens Hospital, 1994-2005.** *Journal of Neurosurgery* (5 Suppl Pediatrics), 2006; 105:343-347.