INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

Diagnostic Lens Insert Tray with Removable Legs

TECHNOLOGY NUMBER 2022-214

Technology ID
2022-214

Category
Medical Devices
Life Sciences

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OVERVIEW

Plastic insert to hold devices used for examination or treatment of eye disease

- Storage unit for soiled lenses or those which are clean and ready to use
- Physical dimensions that make it compatible with existing instrument holding trays

BACKGROUND

An ophthalmology lens holding tray, also known simply as a lens tray or lens case, is a specialized container used to organize and store lenses and other ophthalmic instruments used during eye examinations and procedures. These trays are typically designed to keep lenses clean, accessible, and protected from damage. Lens trays usually have multiple compartments or slots to hold different types and sizes of lenses. Lens trays are typically made from durable materials such as plastic or metal to withstand frequent use and sterilization. Some lens trays feature removable inserts or dividers, allowing for customization of the layout to accommodate various lens sizes and shapes. This flexibility enables ophthalmologists to organize their trays according to their specific needs and preferences. Since ophthalmic instruments require strict hygiene and sterilization protocols to prevent infection, lens trays are designed to be compatible with standard sterilization methods such as autoclaving or chemical disinfection. Existing trays may suffer from limited capacity, inflexible layout, difficult in cleaning, and compatibility issues. So, the need exists for an improved lens holding tray design.

INNOVATION

Researchers at the University of Michigan have developed a plastic insert which can hold several types of devices used for examination or treatment of eye diseases. The diagnostic and therapeutic lenses come into direct contact with the eye and must be cleaned and disinfected between patient uses. This new device is to be used with ophthalmologic devices that directly contact the eye, and it provides space for spoiled lenses or for those ready for patient use. The device can serve as a storage unit for soiled lenses or as a holding area for those lenses which have been cleaned and are ready for use. The insert will be utilized by ophthalmologists in both routine and specialized practice settings. The insert is made of non-porous plastic that allows for easy cleaning, storage, and management of ophthalmologic lenses. It has detachable legs that provide physical separation between the lenses and other surfaces to minimize the risk of cross contamination, minimizing the risk of pathogen cross contamination between patients. The detachable legs also ensure that all parts of the insert may be effectively cleaned. The insert has physical dimensions that make it compatible with existing equipment so that it fits into commercially available instrument holding trays.

ADDITIONAL DETAILS

The Ojeda Lab