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Motorized Retinal Transplant Delivery Device And Method Of Use

Tech ID: 34165 / UC Case 2025-837-0

BRIEF DESCRIPTION

A novel motorized tool designed to precisely deliver retinal tissue during transplantation, enhancing outcomes for patients with retinal degeneration.

FULL DESCRIPTION

This technology is a motorized device that utilizes 3D-printed parts and computer-controlled movements to accurately place retinal tissue into the eye. It aims to replace manual methods, reducing variability and tissue damage during subretinal transplantation, thus potentially improving visual outcomes in conditions like agerelated macular degeneration (AMD) and retinitis pigmentosa (RP).

SUGGESTED USES

- Transplantation procedures for patients with advanced retinal degeneration diseases such as AMD and RP.
- · Research applications in the development and testing of new cell replacement therapies.
- · Use in clinical trials aiming to evaluate the efficacy of novel retinal transplantation techniques.
- · Potential tool in surgical training programs for ophthalmologists specializing in retinal surgery.

ADVANTAGES

- Increased precision in retinal tissue placement compared to manual methods.
- Reduces the risk of collateral tissue damage during transplantation.
- Potentially improves patient outcomes by enhancing graft integration.
- · Supports the transplantation of complex retinal tissue structures, including combined transplants of neural retina and RPE.
- · Facilitates the advancement of cell replacement therapy for retinal degeneration.

PATENT STATUS

Patent Pending

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OTHER INFORMATION

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