

Transnasal Sheath for Endoscopic Procedures

Inventors:

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Executive Summary

Dr. Spencer Payne, Otolaryngologist at the University of Virginia, has designed a nasal sheath for use during transnasal medical procedures, such as endoscopic skull base surgeries, to improve visibility and reduce post-operative scarring and congestion.

Transnasal skull base surgeries are minimally invasive and have become the standard approach for pituitary and sinonasal surgeries. While there are many benefits to a transnasal approach including avoidance of brain and neurovascular retraction and shorter operative time, a transnasal approach can be challenging due to field of view limitations and highly vascularized surrounding tissue. Passing the scope and surgical instruments through the nasal passageway can cause mucosal damage and surgical bleeding.

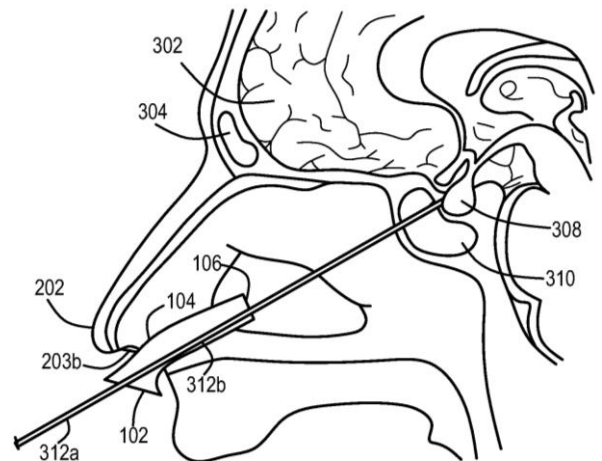
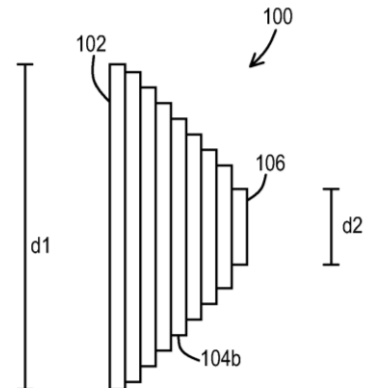
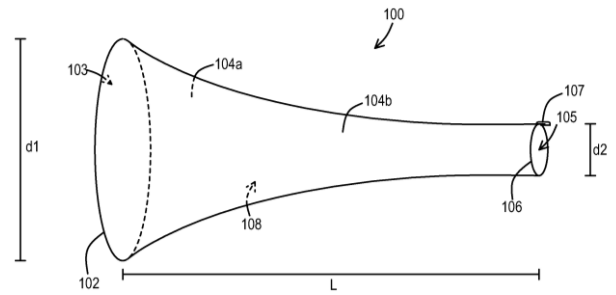
The designed nasal sheath protects the nasal passageway from damage that may occur from passing surgical instruments through the passageway. The collapsible device can be expanded into the nasal passageway of a patient and can be made from a flexible material to allow the device to conform to the contours of the internal channel.

Market size

- Approximately 14,230 pituitary gland tumors diagnosed in the US each year
- 95% of surgeries to remove pituitary gland tumors are done through transnasal procedures

Opportunity

- Partnership for development
- Exclusive/Non-exclusive licensing



Benefits

- Minimized mucosal damage
- Improved visibility
- Reduce post-operative scarring and congestion

Patent Information

- US Patent Application No 14/428,990 filed March 18, 2015 (*allowed*)