Stable Cranial Mount

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Description

- Inexpensive device to reduce errors in Image Guided Cranial (IGS) surgeries.
- Compatible with optical tracking systems.
- Obviates the need for surgical placement of optical markers.
- Applicable to procedures such as endonasal and cochlear surgeries.

Problem and Solution

- Slippage of optical tracking units cause image registration errors.
- These errors can lead to serious negative patient outcomes (e.g. brain damage).
- Present device is an assembly of readily available components.
- Various configurations of product possible (e.g. helmet, headband, etc.)

Current Status

- 1st generation lab prototype constructed and tested.
- Early results show ~50% reduction in movement error.
- Generation 2 design and construction under development.

Ongoing Work

- Generation 2 system development
- Enhanced ease of placement on patient
- Improved look and feel

Granular Locking Device:

- Granular Locking Pads
- Vacuum Tubes
- Elastic or Velcro Strap
- Optical Tracker Mount
- Slip resistant placement
- Use with surgical tools

Intellectual Property Status

A patent application has been filed.