



TECHNOLOGY OFFER

UP-065: Cutting Tool for Soft Tissue Surgery (smart blade)

Key Facts

- **Cut & Seal Tool**
- **Controlled Section**
- **Computer based Surgical Planning Instrument**

The Technology

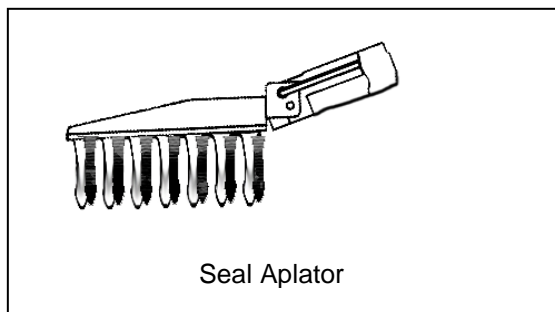
This technology provides a cutting tool (Seal Aplor) for soft tissue which comprises a set of elongated blades suitable for being inserted into a soft tissue body part and simultaneously seal and cut the tissue.

When the Seal Aplor is inserted or during insertion into the tissue, it causes denaturizing by coagulating and cauterizing the tissue to prevent uncontrolled bleeding. In addition this cut and seal procedure can be done against a computer based defined cutting plane.

Background

Removal of a portion of the liver is the most common operation performed in liver surgery. The most typical indication for this liver resection is a malignant tumor.

Unfortunately, the majority of patients with liver tumors are not candidates for resection, because the tumors are located near important liver blood vessels. Hence the challenge is to avoid uncontrolled vessel damage and bleeding. Therefore, special surgical instruments and methods are needed. Computer based surgical planning gives the surgeon all necessary information for choosing the best section plane for each individual patient. To perform the cut along the predetermined section plane without depart, we offer here an instrument that meets the desired requirements.



Advantages

- controlled section along the coagulated section plane
- reliable determination of the cutting plane
- reduced risk of uncontrolled bleeding

Commercial Opportunity

Cut & Seal Tool for soft tissue, i.e. for liver resection

Development Stage

Prototype successfully tested

Inventors

Hannes Kenngott et al.

Intellectual Property

Patent application US-Prov/PCT 61/166,327

Reference:

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