**FINBLADE: SUBCUTANEOUS CUTTING DEVICE**

**MEDICAL DEVICES**

Small cutting tool with a built-in retractable knife for use with ultrasound guidance in minimally invasive surgical procedures that involve cutting subcutaneous tissues.

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**TECHNOLOGY TYPE**
Orthopedics
Minimally Invasive Surgery
Ultrasound-Guided Therapy
Carpal Tunnel Release

**STAGE OF DEVELOPMENT**
- Prototype developed.
- Ongoing testing in cadaver and animal tissue.

**IP PROTECTION**
PCT Pending
Subcutaneous Cutting Device

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**TECHNOLOGY SUMMARY**

Certain medical procedures, such as carpal tunnel release, require cutting subcutaneous tissue. In many of these procedures, swelling or malformation of tissues impacts nearby nerves and causes pain. Cutting the swollen or malformed tissue can provide more space for impinged nerves. In order to cut the targeted tissue, however, a cutting device must be able to both reach the targeted tissue and be removed from the patient. In open surgery for carpal tunnel release, clinicians make a 5 cm incision that takes up to 14 days to heal. Endoscopic surgery, the current alternative, entails two 1.5 cm incisions and has a 4 - 8 day recovery time. The Subcutaneous Cutting Device can be inserted like a needle or with the aid of a sub-centimeter incision, lowering recovery time substantially. Ultrasound allows visualization of the affected structure, as well as the device, in real time, thereby preventing misplacement of the needle and cutting of the wrong tissue. This device has additional applications for cyst punctures or incisions, muscle release, nerve incision, adhesion release, and tenotomy.

**FEATURES AND BENEFITS**
- Works like a needle and cuts like a retractable, precision knife.
- Reduces procedure costs by decreasing the number of instruments required.
- Facilitates carpal tunnel release in provider clinics by eliminating the need for general anesthesia.
- Decreases scarring and adhesion formation.
- Leads to faster recovery times and better patient outcomes.

**INVENTOR PROFILE**

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