

Title (en)  
SYSTEMS AND METHODS FOR ELECTROSURGICAL TREATMENT OF INTERVERTEBRAL DISCS

Title (de)  
SYSTEME UND VERFAHREN ZUR ELEKTROCHIRURGISCHEN BEHANDLUNG VON BANDSCHEIBEN

Title (fr)  
SYSTEMES ET PROCEDES DE TRAITEMENT ELECTROCHIRURGICAL DE DISQUES INTERVERTEBRAUX

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Abstract (en)  
[origin: WO0071043A1] This invention is systems, apparatus, methods for ablation, resection, aspiration, collagen shrinkage, hemostasis of tissue, other body structures in open, and endoscopic spine surgery. In particular, the present invention includes a channeling technique in which small holes or channels are formed within spinal discs, and thermal energy is applied to the tissue surface immediately surrounding these holes or channels to cause thermal damage to the tissue surface, thereby stiffening the surrounding tissue structure for reducing the volume of the disc to relieve pressure on the surrounding nerves. High frequency voltage is applied between one or more active electrode(362), and one or more return electrode (360) to volumetrically remove or ablate at least a portion of the disc tissue. The active electrodes are advanced through the space left by the ablated tissue to form a channel, hole, divot, or other space in the disc tissue. In addition, the high frequency voltage effects a controlled depth of thermal heating of the tissue surrounding the hole to de-bulk, and/or stiffen the disc structure, thereby relieving neck or back pain.

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