

CLAIMS:

1. A tissue ablation device, the device comprising:
 - a sheath comprising a distal end that is positionable at an ablation site in the tissue, a proximal end and a lumen extending therebetween;
 - one or more electrodes that are advanceable and retractable through the lumen, wherein a distal portion of the one or more electrodes is deployable into a tissue ablating configuration from the distal end of the sheath upon advancement, wherein the tissue ablating configuration of the or each of the one or more electrodes is independently circular or helical in shape, and the one or more electrodes are removable from the lumen via the proximal end of the sheath upon retraction, whereupon the lumen becomes vacated;
 - wherein the distal end of the sheath comprises crenulations for guiding an initial direction of deployment of the one or more electrodes; and
 - wherein the sheath is configured for a surgical material to traverse the vacated lumen for delivery from the distal end of the sheath into the tissue.
2. The device of claim 1, further comprising a dispenser which is operable to dispense the surgical material into the vacated lumen.
3. The device of claim 2, wherein the dispenser is attachable to the proximal end of the sheath.
4. The device of any one of claims 1 to 3, wherein the one or more electrodes are configured to have a polarity during ablation opposite that of a grounding pad positioned on the body of a patient, whereby ablation occurs between the electrode(s) and the grounding pad.
5. The device of any one of claims 1 to 4, wherein the one or more electrodes are configured to have a polarity during ablation opposite that of an electrically conductive portion of the sheath, whereby ablation occurs between the electrode(s) and the electrically conductive portion of the sheath.
6. The device of any one of claims 1 to 3, wherein the one or more electrodes comprise a plurality of electrodes configured to have opposite polarities during ablation.

7. The device of any one of claims 1 to 6, wherein the or each of the one or more electrodes have a cross-sectional shape that is independently selected from: circular, a circular segment, elliptical, triangular and flat.
8. The device of any one of claims 1 to 7, wherein the one or more electrodes are configured for single use.
9. The device of any one of claims 1 to 8, wherein the one or more electrodes are formed from a material selected from carbon steel or a nickel-titanium alloy.
10. The device of any one of claims 1 to 9, wherein the sheath is configured for percutaneous insertion into the tissue or for endoscopic insertion into the tissue.
11. The device of any one of claims 1 to 10, further comprising a deployment handle which is operable to advance and retract the one or more electrodes through the lumen.
12. The device of claim 11, wherein the deployment handle is removably attachable to the tissue ablation device.
13. The device of claim 11 or claim 12, wherein the deployment handle is orientated at an angle to the sheath.