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United States Patent [19] VanDusseldorp

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[54] **CUTTING LOOP FOR AN ELECTROCAUTERY PROBE**

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[*] Notice: This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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[51] Int. Cl.⁷ **A61B 18/18**

[52] U.S. Cl. **606/46**; 606/41; 606/45; 606/49

[58] Field of Search 606/41-50

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[57] ABSTRACT

A cutting loop (212) for an electrocautery probe (210). The cutting loop (212) includes a conductor member having a cutting portion (214) with a proximal edge (214a) and a distal edge (214b), the proximal edge (214a) being adapted for creating an incision, i.e., resecting human tissue as the cutting loop (212) is traversed in a cutting direction approximately perpendicular to the proximal edge (214a). During the resection procedure, the cutting portion defines a cutting plane that is generally parallel to the surface of the tissue being resected. The proximal edge (214a) of the cutting portion (214) is characterized as flat or blunt, and is oriented to be substantially perpendicular to both the cutting direction and the cutting plane. The flat or blunt shape of the proximal edge (214a) enhances the current distribution characteristics of the cutting loop (212). Preferably, the conductor member is generally U-shaped and the cutting portion (214) has a substantially rectangular cross-section, such that the proximal and distal faces (214a, 214b) of the cutting portion (214) are substantially parallel to each other. The rectangular cross-section of the cutting portion (214) may be substantially uniform, or may be variable along the length of the cutting portion (214). According to the invention, the rectangular cross-section of the cutting portion (214) further promotes the enhanced current distribution of the cutting loop (212). The conductor member may include a trailing portion (216) adjacent and spaced apart from the cutting portion in the cutting plane.

16 Claims, 3 Drawing Sheets

