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**Declaration under Rule 4.17:**

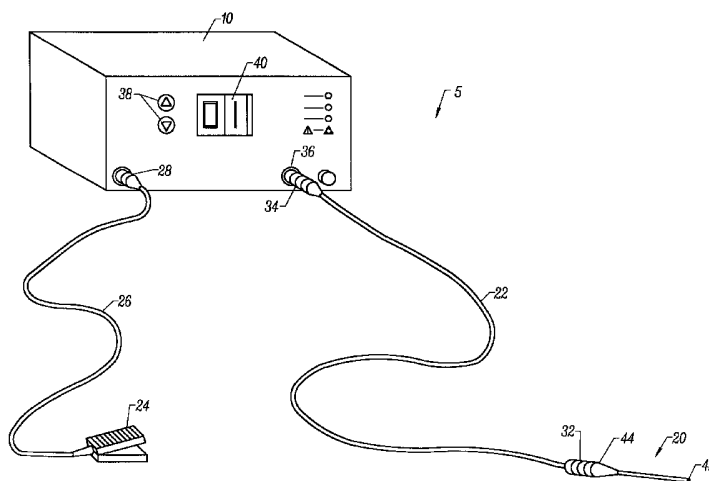
— of inventorship (Rule 4.17(iv)) for US only

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[Continued on next page]

(54) Title: ELECTROSURGICAL APPARATUS AND METHODS FOR TISSUE TREATMENT & REMOVAL



(57) Abstract: Systems, apparatus, and methods for ablating, sculpting, severing, shrinking, coagulating, or otherwise modifying a target tissue to be treated. In a method for treating a target tissue, an active electrode terminal (42) of an electrosurgical probe (20) is positioned in at least close proximity to the target tissue. A high frequency voltage is then applied between the active electrode (42) and a return electrode (112), wherein, the high frequency voltage is sufficient to volumetrically (ablate), sever, or modify at least a portion of the target tissue. The probe (20) comprises an electrode assembly including an electrode support (44) and at least one active electrode terminal (42) arranged within the electrode support (44), the electrode support (44) having a suction cavity, and each active electrode terminal (42) having an electrode lumen therein, the electrode lumen in communication with the suction cavity. Unwanted materials may be aspirated from a surgical site via the electrode lumen.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/29476

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : A61B 17/20; A61B 18/18 US CL : 604/22; 606/45,49 According to International Patent Classification (IPC) or to both national classification and IPC											
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 604/22; 606/45,49 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched None Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) None											
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X — Y</td> <td>US 5,697,882 A (EGGERS et al.) 16 December 1997 (16.12.1997), See fig. 20 and related text.</td> <td>1-6,11,12,17-26,28-38,42-45,47,55,56,58-60,65,69,70,72,74-78,84-97 7-10,13-16,27,39-41,46,48-54,57,61-64,66-68,71,73,79-83</td> </tr> <tr> <td>A</td> <td>US 5,374,261 A (YOON) 20 December 1994 (20.12.1994), See entire document.</td> <td>1-97</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X — Y	US 5,697,882 A (EGGERS et al.) 16 December 1997 (16.12.1997), See fig. 20 and related text.	1-6,11,12,17-26,28-38,42-45,47,55,56,58-60,65,69,70,72,74-78,84-97 7-10,13-16,27,39-41,46,48-54,57,61-64,66-68,71,73,79-83	A	US 5,374,261 A (YOON) 20 December 1994 (20.12.1994), See entire document.	1-97
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Michael J Hayes Telephone No. 703-308-0858									