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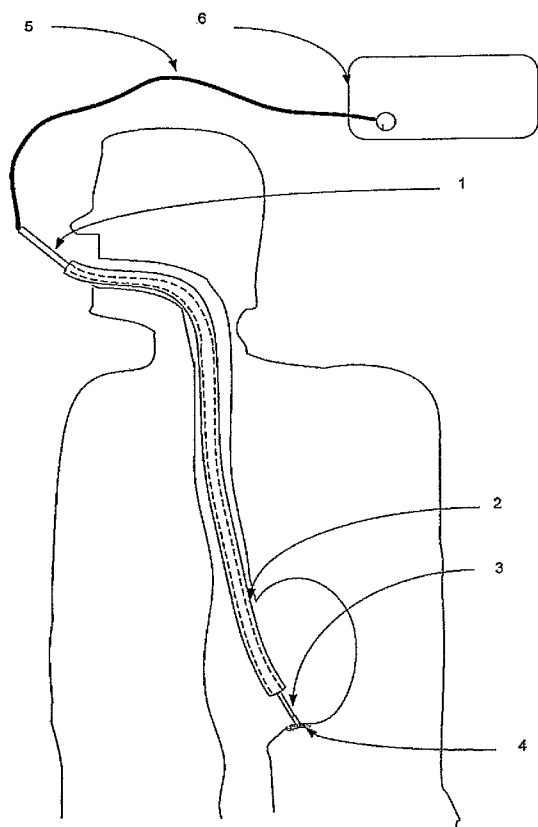
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(54) Title: TISSUE ABLATOR



(57) Abstract: A flexible RF device (1) can be deployed through a flexible endoscope. An electrode structure has a central electrode (12) and outer electrode (11). Flexible electrodes (30), circular electrodes (51, 53) and circular loop assemblies (55, 56) with different diameters are also disclosed, as well a tweezer electrodes (41) with pads (43) for increasing contact area. Retractable electrodes (100) are also disclosed.

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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/002793

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B18/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 197 13 797 A1 (VALLEYLAB INC [US]; UNIV ILLINOIS [US]) 9 October 1997 (1997-10-09) figures 1,3 column 5, line 13 - line 66	1
X	US 5 995 875 A (BLEWETT JEFFREY J [US] ET AL) 30 November 1999 (1999-11-30) figures 1,2,12,14,16,19 column 6, line 3 - column 9, line 33	1-3, 18-22, 25,33,34
X	US 2002/138075 A1 (EDWARDS STUART D [US] ET AL) 26 September 2002 (2002-09-26) figures 2B,4B,17 paragraph [0079] - paragraph [0102] ----- -/--	1-3, 18-22, 25,33,34

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

7 February 2008

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/002793

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 6 488 673 B1 (LAUFER MICHAEL D [US] ET AL) 3 December 2002 (2002-12-03)</p> <p>figures 6,20A,20B column 11, line 8 - column 13, line 39 column 17, line 26 - column 20, line 63 -----</p>	<p>1,2,18, 19,23, 24,33,34</p>

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2007/002793

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 32
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 18-25 (not dependent on claim 4), 33,34

An electromagnetic energy delivery device with an elongate main body that is flexible along the length thereof to enable the device to conform to the shape of a channel of a flexible endoscope.

2. claims: 4-17, 18-25 (not dependent on claim 1), 33, 34

An electromagnetic energy delivery device with an electrode assembly that includes a non-penetrating electrode.

3. claims: 26-29

An electromagnetic energy delivery electrode assembly including a ring shaped electrode.

4. claims: 30,31

An electromagnetic energy delivery electrode assembly including electrodes arranged to clamp around tissue.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2007/002793

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 19713797	A1	09-10-1997	JP	10024049 A	27-01-1998
US 5995875	A	30-11-1999	NONE		
US 2002138075	A1	26-09-2002	NONE		
US 6488673	B1	03-12-2002	US	2007106296 A1	10-05-2007