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(71) Applicants and

(72) Inventors: LAU, Michael [US/US]; 7015 147th Street SW, Edmonds, WA 98026 (US). PEASE, Leonard, F. [US/US]; 56 Timmerman Drive, Richland, WA 99352 (US).

(74) Agents: PARKER, Paul, T. et al.; Perkins Coie LLP, P.O. Box 1247, Seattle, WA 98111-1247 (US).

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(54) Title: METHODS AND APPARATUSES FOR CONTOURING TISSUE BY SELECTIVE APPLICATION OF ENERGY

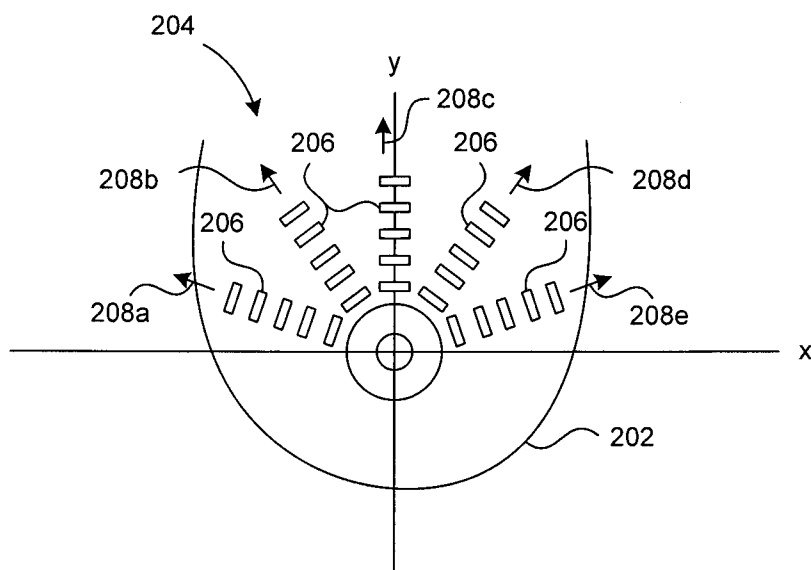


FIG. 2C

(57) Abstract: Methods and apparatuses for contouring, shaping and/or directionally shrinking tissue by selective application of energy are disclosed herein. One embodiment of a method of contouring tissue includes determining a contraction direction along which the tissue is to be preferentially contracted and applying energy to a plurality of discrete elongated exposed regions of tissue spaced apart from each other among non-exposed regions of tissue. At least one of the exposed regions can be oriented such that a longitudinal dimension of the exposed regions is generally transverse to the contraction direction.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/85629

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61F 7/00, A61B 18/04 (2008.04) USPC - 607/96, 606/27 According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC(8) - A61F 7/00, A61B 18/04 (2008.04) USPC - 607/96, 606/27</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched IPC(8) - A61F 7/00, A61B 18/04 (2008.04) USPC - 607/96, 606/27, 606/1, 601/15, 601/1, 607/1</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWest (USPT, PGPB, EPAB, JPAB), Google Scholar, WIPO, PubMed Search terms - Tissue contouring, contouring, device, energy, auxetic, ablation, apparatus, electrosurgical</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <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</td> <td>US 6,936,046 B2 (HISSONG et al) 30 August 2005 (30.08.2005), esp (col 10, ln 15-32), (col 13, ln 15-24), (col 16, ln 13-24), Figure 2, (col 1, ln 56-60)</td> <td>25-30</td> </tr> <tr> <td>X</td> <td>US 2004/0206365 A1 (KNOWLTON) 21 October 2004 (21.10.2004), esp para [0014], [0015], [0211], [0212], [0213], [0238], [0111], [0016]</td> <td>17-24</td> </tr> <tr> <td>X</td> <td>US 2004/0210214 A1 (KNOWLTON) 21 October 2004 (21.10.2004), esp para [0025], [0175],[0177], [0224], [0258]</td> <td>1-16, 44-47</td> </tr> <tr> <td>Y</td> <td>US 7,115,123 B2 (KNOWLTON et al) 3 October 2006 (03.10.2006), esp (col 12, ln 17-26), (col 7, ln 22-25), (col 8, ln 14-28), (col 5, ln 6-13)</td> <td>34-35, and 38-43</td> </tr> <tr> <td>X ---- Y</td> <td>US 6,081,749 A (INGLE et al) 27 June 2000 (27.06.2000), esp (col 10, ln 4-17), (col 9, ln 22-31), Figure 2E, (col 4, ln 1-3), (col 3, ln 65-67), (col 5, ln 46-50)</td> <td>31-33, 36,37 ----- 34-35, 38-43</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 6,936,046 B2 (HISSONG et al) 30 August 2005 (30.08.2005), esp (col 10, ln 15-32), (col 13, ln 15-24), (col 16, ln 13-24), Figure 2, (col 1, ln 56-60)	25-30	X	US 2004/0206365 A1 (KNOWLTON) 21 October 2004 (21.10.2004), esp para [0014], [0015], [0211], [0212], [0213], [0238], [0111], [0016]	17-24	X	US 2004/0210214 A1 (KNOWLTON) 21 October 2004 (21.10.2004), esp para [0025], [0175],[0177], [0224], [0258]	1-16, 44-47	Y	US 7,115,123 B2 (KNOWLTON et al) 3 October 2006 (03.10.2006), esp (col 12, ln 17-26), (col 7, ln 22-25), (col 8, ln 14-28), (col 5, ln 6-13)	34-35, and 38-43	X ---- Y	US 6,081,749 A (INGLE et al) 27 June 2000 (27.06.2000), esp (col 10, ln 4-17), (col 9, ln 22-31), Figure 2E, (col 4, ln 1-3), (col 3, ln 65-67), (col 5, ln 46-50)	31-33, 36,37 ----- 34-35, 38-43
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<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"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	"E" earlier application or patent but published on or after the international filing date	"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	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed									
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<p>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. 571-273-3201</p>		<p>Authorized officer: Lee W. Young</p> <p>PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																		