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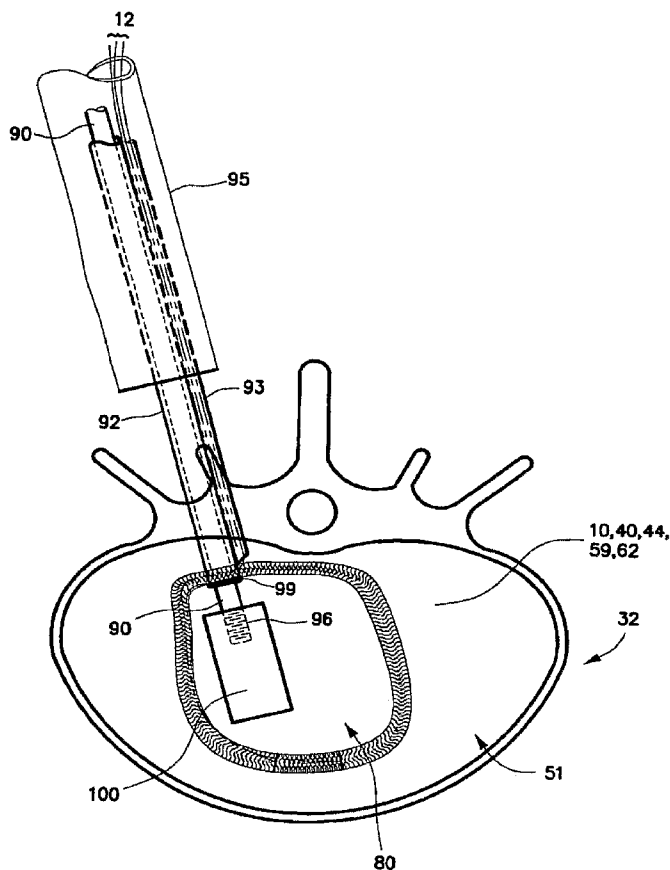
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[Continued on next page]

(54) Title: MECHANICAL APPARATUS AND METHOD FOR ARTIFICIAL DISC REPLACEMENT



(57) Abstract: The present invention relates to a device and method which may be used to reinforce the native annulus during spinal surgery. The device is a catheter based device which is placed into the inter-vertebral space following discectomy. The distal end of the catheter is comprised of an expansile loop which may be increased in diameter by advancement of a portion of the catheter via its proximal end, such proximal end remaining external to the body. The expansile loop may be formed such that when the loop is diametrically contracted the loop feeds into its other end. Stabilization of the outer portion of the loop and pulling out the inner portion will thereby increase the overall diameter of the loop while maintaining it as a closed loop or torus. The expansile loop can use an attachment means to secure it to substantially healthy tissues of the annulus, nucleus, or endplates.

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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 practicable, search terms used)

Patbase, Google Scholar

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	US 2004/0049283 A1 (PATEL) 11 March 2004 (11.03.2004) entire document	1, 7, 8
Y		2-6, 9, 10
X ---	US 2004/0267368 A1 (KUSLICH) 30 December 2004 (30.12.2004) entire document	11
Y		12-16
Y	US 2001/0032019 A1 (VAN DYKE et al) 18 October 2001 (18.10.2001) entire document	2-6, 9, 10, 12-16
Y	US 6,156,037 A (LEHUEC et al) 05 December 2000 (05.12.2000) entire document	17, 18
Y	US 2002/0173851 A1 (MCKAY) 21 November 2002 (21.11.2002) entire document	17, 18

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