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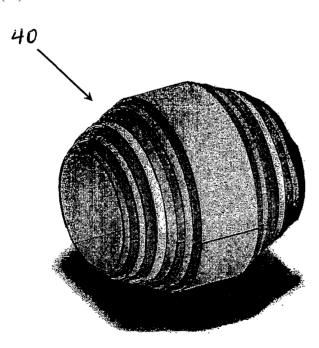
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(54) Title: EXPANDABLE IMPLANT FOR REPAIRING A DEFECTIVE INTERVERTEBRAL NUCLEUS



(57) Abstract: Expandable implants for repairing a nuclear defect of an intervertebral disc, and methods and apparatuses for delivering the same into the disc. The implants generally have a compressed form having a size adapted for insertion into the intervertebral disc, and a composition that allows the implant to expand from the compressed form into an expanded form after the implant is inserted into the nucleus. The expanded form of the implant has a configuration that fills the nuclear defect. The composition used to make the implant can include a shape memory alloy (SMA) or any other suitable material. Various devices can be used to insert the implants into the area being treated.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/38675

A. CLASSIFICATION OF SUBJECT MATTER IPC: A61F 2/44(2006.01) A61B 17/70(2006.01)					
USPC: 623/17.11 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) U.S.: 623/17.11, 17.16, 1.15, 1.18, 1.2; 606/61					
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) Please See Continuation Sheet					
C. DOCT	JMENTS CONSIDERED TO BE RELEVANT		THE TAX TO SERVICE STATE OF THE TAX TO SERVICE STATE STATE OF THE TAX TO SERVICE STATE OF THE TAX TO SERVICE STATE		
Category *	Citation of document, with indication, where a		Relevant to claim No.		
X	US 6,582,467 B (Teitelbaum et al) 24 June 2003 (24.		1,11,13,15-19,25,49		
х	col. 2, lines 43,44,50, col. 3, lines 20,21, col. 4, lines 18-24,65-67, col. 6, lines 11-13, 55-60. US 6,224,630 B1 (Bao et al) 01 May 2001 (01.05.2001), Figs. 1, 3,7, col. 3, lines 8-15, col.		1,11,19		
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Y	US 5,549,679 A (Kuslich) 27 August 1996 (27.08.1996), Figs. 5,6,9,38,40, col. 6, lines 58-62, col. 7, lines 9-12, col. 9, lines 10-29.		19-29,33-36,38,46 5,6,27,31,32		
Further	documents are listed in the continuation of Box C.	See patent family annex.			
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	t defining the general state of the art which is not considered to be of relevance	date and not in conflict with the application principle or theory underlying the inver-	ntion		
"E" earlier ap	plication or patent published on or after the international filing date	"X" document of particular relevance; the c considered novel or cannot be consider when the document is taken alone			
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Mail Stop PCT, Attn: ISA/US Commissioner for Patents		Authorized officer Brian Pellegrino Sharm Marene for Telephone No. 571-272-4300			
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INTERNATIONAL SEARCH REPORT

International application No. PCT/US05/38675

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

ategory *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Х	US 2004/0010315 A (Song) 15 January 2004 (15.01.2004), Figs. 1,9, paragraphs 21,23, 29.	1,11,15-18
Y		14,19-26,40
Y	US 4,950,227 A (Savin et al) 21 August 1990 (21.08.1990), Fig. 1, col. 4, lines 9,10,23, 37, 38.	14,26,40
X	US 5,556,413 A (Lam) 17 September 1996 (17.09.1996), Figs. 2,9A,9B, col. 3, lines 11-22,35,62,64-66, col. 6, lines 50-58, col. 12, lines 30-37.	1,4,11,14- 18,27,30,37,39-44,4
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Y	US 2003/0102469 A1 (Jones) 05 June 2003 (05.06.2003), See paragraphs 231,233,321,380.	27,31,32

	International application No.	
INTERNATIONAL SEARCH REPORT	PCT/US05/38675	
Continuation of B. FIELDS SEARCHED Item 3:		
EAST database		
text terms: stent, shape memory, nitinol, coil, wound, spinal, intervertebral		