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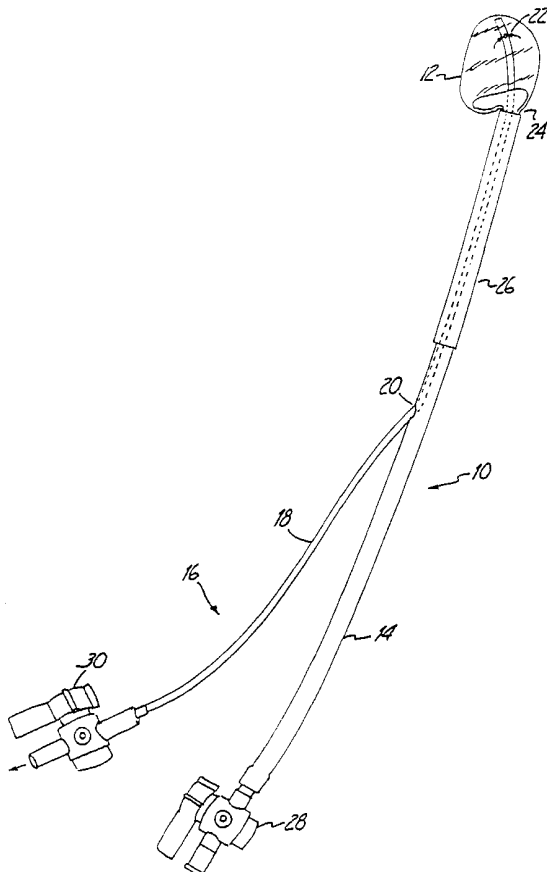
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[Continued on next page]

(54) Title: INTERVERTEBRAL DISC PROSTHESIS



(57) Abstract: A system for repairing an intervertebral disc by delivering and curing a biomaterial *in situ* within the disc. The system includes both a device, having an insertable balloon and related lumen, controls and adapters, as well as *in situ* curable biomaterial (and related biomaterial delivery means). The system can allow the doctor to determine a suitable endpoint for biomaterial delivery, by controlling distraction and/or biomaterial delivery pressure, and in turn, to deliver a desired quantity of biomaterial to the balloon in order to achieve improved polymer cure and implant characteristics. Also provided is a related method for repairing an intervertebral disc by using such a system to deliver and cure the biomaterial *in situ*. The system can be used to implant a prosthetic total disc, or a prosthetic disc nucleus in a manner that leaves the surrounding disc tissue substantially intact.



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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61F2/30 A61F2/44 A61F2/46 A61B17/00 A61L27/18

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)  
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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 practical, search terms used)

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 20939 A (ADVANCED BIO SURFACES INC) 22 May 1998 (1998-05-22)	1-23, 25-27
Y	page 10 -page 15, line 23 page 16, line 22 -page 19, line 29 page 22, line 14 -page 37, line 2 page 40, line 13 -page 43, line 19 page 45, line 18 -page 48, line 24 page 50 -page 57, line 29 page 68, line 10 - line 29 claims 31-45; figures 1-5 ---	28,29
Y	WO 99 61084 A (ADVANCED BIO SURFACES INC) 2 December 1999 (1999-12-02) cited in the application page 4, line 20 - line 30 page 11, line 28 -page 13, line 19 claims; figure 7 ---	28,29
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 97 26847 A (ADVANCED BIO SURFACES INC) 31 July 1997 (1997-07-31) cited in the application page 3, line 16 -page 5, line 11 page 12, line 23 -page 15, line 2 page 17, line 29 -page 18, line 13 page 19, line 25 -page 23, line 11 claims</p> <p style="text-align: center;">---</p>	<p>1-23, 25-27</p>
A	<p>WO 95 31948 A (KUSLICH STEPHEN D) 30 November 1995 (1995-11-30) cited in the application claims; figures</p> <p style="text-align: center;">---</p>	<p>1-23, 25-27</p>
A	<p>FR 2 639 823 A (GARCIA ALAIN) 8 June 1990 (1990-06-08) cited in the application claims; figures</p> <p style="text-align: center;">---</p>	<p>1</p>
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A	<p>WO 95 30388 A (ADVANCED BIO SURFACES INC) 16 November 1995 (1995-11-16) claims</p>	<p>1</p>
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