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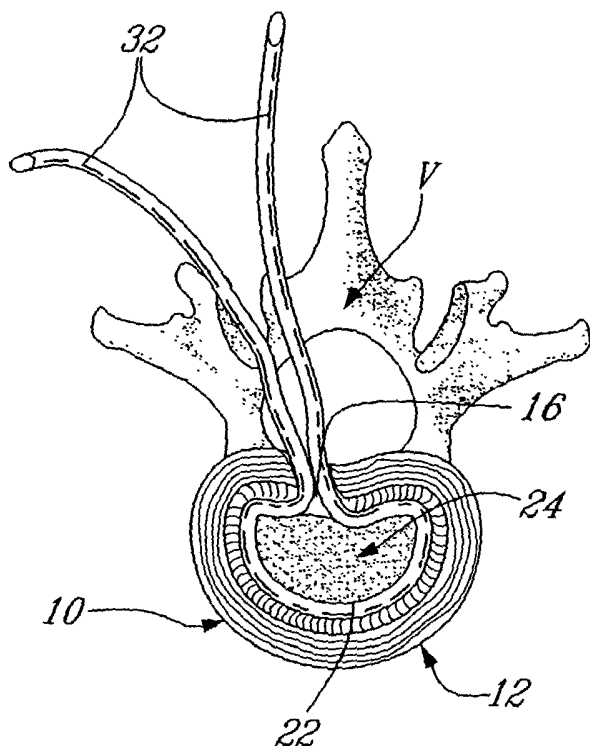
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(54) Title: INTER-VERTEBRAL DISC PROSTHESIS FOR LUMBAR RACHIS THROUGH POSTERIOR SURGERY THEREOF



(57) Abstract: A prosthetic inter-vertebral disc for positioning in an inter-somatic space between a pair of adjacent vertebrae (V) and within a natural annulus fibrosus (12) or a remaining portion thereof, comprises a flexible elongated outer annulus member (22) and an expandable inner nucleus member (24). The outer annulus member (22) is adapted to be introduced into the inter-somatic space through a tenotomy opening (16) and to follow an inside wall of the natural annulus fibrosus (12) such as to form a closed loop therewithin with the loop defining a chamber (20). The inner nucleus member (24) is adapted to be introduced in a dehydrated state into the inter-somatic space also through the tenotomy opening (16) and within the outer annulus member (22), and to then be hydrated so as to extend in the chamber (20) peripherally up to the outer annulus member (22). Both the outer annulus member (22) and the inner nucleus member (24) are hydrogels. The outer annulus member (22) is biased outwardly when being introduced in the inter-somatic space such that it follows the inside wall of the natural annulus fibrosus (12). A free end of the outer annulus member (22) extends outwardly of the closed loop and into the tenotomy opening for sealing the same. A method of installing the prosthetic disc is also disclosed.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA 01/01377CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61F2/44

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)

IPC 7 A61F

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	WO 98 34568 A (LI MEDICAL TECH INC ; LI LEHMANN K (US); LI RHODEMANN (US)) 13 August 1998 (1998-08-13) page 26, last paragraph -page 28, paragraph 1	1
A	US 5 171 280 A (BAUMGARTNER WALTER) 15 December 1992 (1992-12-15) cited in the application abstract	1
A	US 5 976 186 A (HIGHAM PAUL A ET AL) 2 November 1999 (1999-11-02) cited in the application claims 1,2	1
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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	US 5 192 326 A (HIGHAM PAUL A ET AL) 9 March 1993 (1993-03-09) cited in the application abstract ---	1
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Information on patent family members

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