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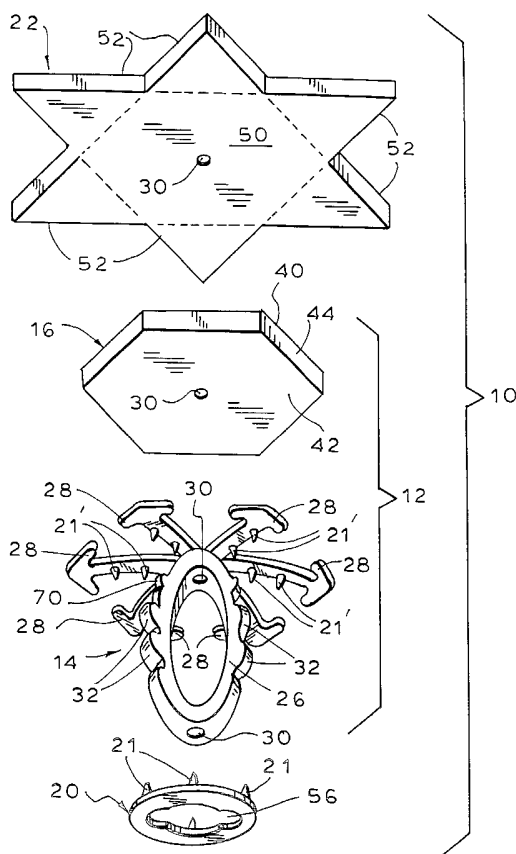
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[Continued on next page]

(54) Title: CARTILAGE REPAIR UNIT



(57) Abstract: A bio-absorbable cartilage repair system (10) is provided for regenerating damaged or destroyed articular cartilage on a joint surface of a bone by establishing a chondrogenic growth-supporting matrix between an area of damaged or destroyed articular cartilage that has been removed and an adjacent healthy area of articular cartilage and subchondral cancellous bone. The system (10) is an assembly (12) of a delivery unit (14) and a porous insert (16). The delivery unit (14) is formed of bio-absorbable material and configured and dimensioned to be mounted in both an area of damaged or destroyed articular cartilage that has been removed and an adjacent healthy area of articular cartilage and cancellous bone. The delivery unit (14) has a central body (26) and a plurality of radially extending, flexible support arms (28) projecting outwardly from the central body and configured and dimensioned to support the insert (16) at least partially thereover. The insert (16) is supported by the delivery unit (14), formed of bio-absorbable material, and establishes communication between the removed area and the adjacent healthy area for a chondrogenic growth-supporting matrix.

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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/US00/15148

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A61B 17/58

US CL : 606/75

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. : 606/75; 623/14.12, 23.72, 23.73, 23.74

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)

EAST search: cartilage WITH repair; osteogenic WITH growth-supporting WITH matrix

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,749,874 A (SCHWARTZ et al.) 12 May 1998, figs. 9-12.	1-4, 7-9, 12, 17, 22, 23 & 44
Y		5, 6, 10, 11, 15 & 31
A		13, 14, 16, 18-21, 24-30 and 32-47
Y	US 4,976,715 A (BAYS et al.) 11 December 1990, FIGS. 1-8.	5 & 6

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*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
*A* document defining the general state of the art which is not considered to be of particular relevance	*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
*E* earlier document published on or after the international filing date	*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
*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)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/15148

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y --- A	US 5,728,102 A (FEINGOLD et al.) 17 March 1998, figs. 25 & 30.	10, 11 & 15 ----- 13, 14, 16, 18-21, 24-30 & 32-471
Y, P	US 6,096,080 A (NICHOLSON et al.) 01 August 2000, col. 13, lines 62- .	31