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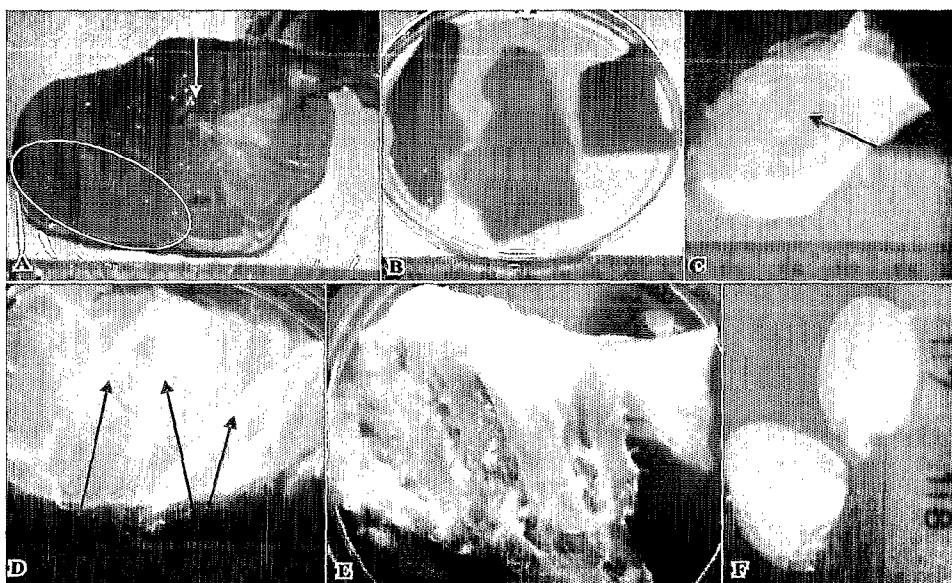
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NATURAL TISSUE-DERIVED DECELLULARIZED MATRIX AND METHODS OF GENERATING AND USING SAME



(57) Abstract: Decellularized tissue-derived extracellular matrices (ECM) and methods of generating and using same are provided. The method of generating a decellularized matrix includes the steps of: (a) subjecting the tissue to washes and a hypertonic buffer; (b) subjecting the tissue to an enzymatic proteolytic digestion with an enzyme such as trypsin; and (c) removing all cellular components from the tissue using a detergent solution which includes Triton-X-100 and ammonium hydroxide. Specifically, there is provided a decellularized myocardium-derived matrix which is completely devoid of all cellular components and hence non-immunogenic in a subject, exhibits suitable structural and mechanical properties for cardiac tissue engineering or replacement therapy of damaged cardiac tissue, and is capable of remodeling upon seeding of cells.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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)

C12N A61L

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, EMBASE, BIOSIS, WPI Data, CHEM ABS Data, LIFESCIENCES, SCISEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 96/32905 A (ST JUDE MEDICAL [US]; BISHOPRIC NANETTE H [US]; DOUSMAN LINDA [US]; YA) 24 October 1996 (1996-10-24) claims 1-21 examples 1,4 page 6, line 13 - line 30 page 12, line 26 - page 13, line 11 ----- -/--	1-10,21, 22,24, 32,36,40 11-19



Further documents are listed in the continuation of Box C.



See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"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

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International application No

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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.
X	ZELTINGER JOAN ET AL: "Development and characterization of tissue-engineered aortic valves" TISSUE ENGINEERING, vol. 7, no. 1, February 2001 (2001-02), pages 9-22, XP002405759 ISSN: 1076-3279	1-10, 21-24, 32,36
Y	abstract page 10, paragraph 5 - page 11, paragraph 1 figure 6	1-41
X	WO 02/14480 A2 (UNIV DUKE [US]; MITCHELL SHANNON [US]; KOH JENNIFER [US]; NIKLASON LAU) 21 February 2002 (2002-02-21) page 27 example 7 page 28, line 17 - line 20 abstract	1-12,14, 15,18, 19, 21-24, 32,36,40
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International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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Information on patent family members

International application No

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