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(74) Agents: RESNICK, David S. et al.; Nixon Peabody LLP,
100 Summer Street, Boston, MA 02110-2131 (US).

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(71) Applicant (for all designated States except US):
TRUSTEES OF TUFTS COLLEGE [US/US]; Ballou Hall, Medford, Massachusetts 02155 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KAPLAN, David L.** [US/US]; 46 Pond Street, Concord, Massachusetts 01742 (US). **OMENETTO, Fiorenzo** [US/US]; 22 Prospect Street, Wakefield, Massachusetts 02155 (US). **MARCHANT, Jeffrey** [US/US]; 478 Newtown Road, Littleton, Massachusetts 01460 (US). **PANJWANI, Noorjahan** [US/US]; 27 Richard Street, Medford, Massachusetts 02155 (US). **LAWRENCE, Brian** [US/US]; 44 Woodbine Road, Medford, Massachusetts 02155 (US).

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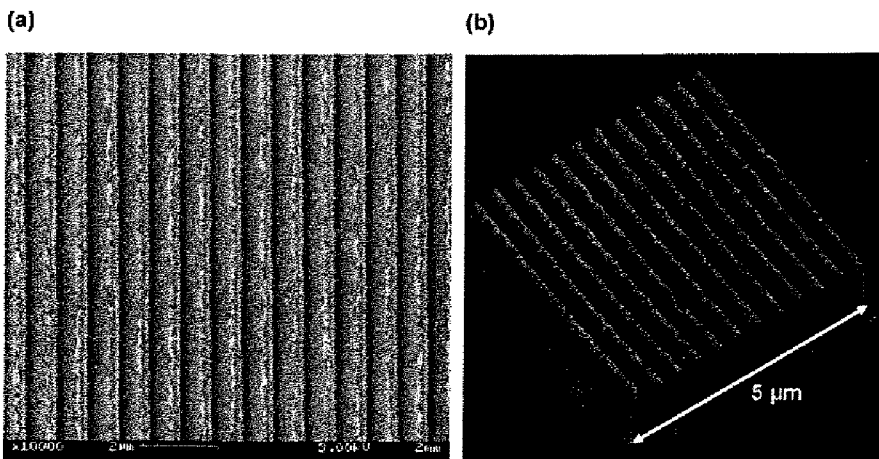


Figure 1. Silk films with cast microgrooves. (a) FESEM image of groove topology. (b) AFM of film surface. Each groove is approximately 1.7 μm in width and 1 μm in depth.

(57) Abstract: This invention relates to a lamellae tissue layer, comprising a grooved silk fibroin substrate comprising tissue-specific cells. The silk fibroin substrates provides an excellent means of controlling and culturing cell and extracellular matrix development. A multitude of lamellae tissue layers can be used to create a tissue-engineered organ, such as a tissue-engineered cornea. The tissue-engineered organ is non-immunogenic and biocompatible.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C12N

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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 01/25403 A (CONSORZIO PER GLI STUDI UNI [IT]; ARMATO UBALDO [IT]; MIGLIARESI CLAUD) 12 April 2001 (2001-04-12)	1-5, 9-12, 16-19, 24,25, 27-40, 43-47
Y	page 17	6-8, 13-15, 20-23, 26,41,42
	page 23, line 28 - line 30	
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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Schwachtgen, J

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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.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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