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(54) Title: MODIFIED SILK FILMS CONTAINING GLYCEROL

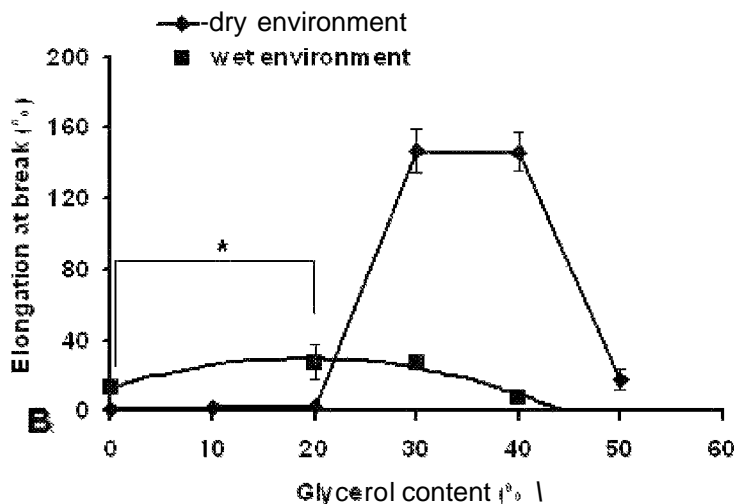


Figure 3B



(57) **Abstract:** The present invention provides for compositions and methods for preparing aqueous insoluble, ductile, flexible silk fibroin films. The silk films comprise silk fibroin and about 10% to about 50% (w/w) glycerol, and are prepared by entirely aqueous processes. The ductile silk film may be further treated by extracting the glycerol from and re-drying the silk film. Active agents may be embedded in or deposited on the glycerol modified silk film for a variety of medical applications. The films may be shaped into 3-dimensional structures, or placed on support surfaces as labels or coatings. The glycerol modified silk films of the present invention are useful in variety of applications such as tissue engineering, medical devices or implants, drug delivery, and edible pharmaceutical or food labels.

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility Models and applications for Utility Models Japanese Utility Models and applications for Utility Models		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) "silk fibroin", "glycerol", "film", "active agent", and similar terms		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	JP 05-043600 A (KANEBO CO., LTD.) See abstract, claim (1), and paragraphs (6-9, 19, 20)	27 May 1982 1-27
A	WO 2004-060424 A2 (GRAVETT, D M, et al) See abstract, claims (1, 3, 5, 11, 112-145), and pages (4-6, 16, 23-25, 43)	22 Jul 2004 1-27
A	WO 2005-103158 A1 (NIPPON SHINYAKU CO LTD) See abstract, claims (1, 4, 5, 7), and paragraphs (7, 17-19)	03 Nov 2005 1-27
A	KR 10-0431659 B1 (TSUBOUCHI, K) See abstract, claims (1-18), and pages (2-9)	17 May 2004 1-27
<input type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
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