

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 January 2010 (28.01.2010)

PCT

(10) International Publication Number
WO 2010/009511 A1

(51) International Patent Classification:

A61L 27/24 (2006.01) A61F 2/08 (2006.01)
A61K 35/32 (2006.01) A61L 27/50 (2006.01)

(21) International Application Number:

PCT/AU2009/000946

(22) International Filing Date:

24 July 2009 (24.07.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2008903789 24 July 2008 (24.07.2008) AU

(71) Applicant (for all designated States except US): THE
UNIVERSITY OF WESTERN AUSTRALIA
[AU/AU]; Nedlands, Western Australia 6907 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): ZHENG, Ming Hao
[AU/AU]; 2 Kingsland Avenue, City Beach, Western
Australia 6015 (AU).

(74) Agent: GRIFFITH HACK; Level 19, 109 St George's
Terrace, Perth, Western Australia 6000 (AU).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: A COLLAGEN SCAFFOLD FOR CELL GROWTH AND A METHOD FOR PRODUCING SAME

(57) Abstract: A bioscaffold and method of manufacture is described. The bioscaffold comprised greater than 80% type I collagen fibers or bundles having a knitted structure providing tensile load strength. The method of manufacture comprises the steps of: (a) isolating collagen fibers or bundles; (b) incubating said fibers or bundles in a mixture of NaOH, alcohol, acetone, HCl and ascorbic acid; and (c) mechanical manipulation of said fibers or bundles to produce a knitted structure.



WO 2010/009511 A1