

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
10 December 2009 (10.12.2009)

(10) International Publication Number  
**WO 2009/149295 A3**

(51) International Patent Classification:

A61L 27/40 (2006.01) A61C 13/08 (2006.01)  
A61L 27/30 (2006.01) A61F 2/30 (2006.01)  
A61L 27/32 (2006.01) A61B 17/86 (2006.01)

(21) International Application Number:

PCT/US2009/046311

(22) International Filing Date:

4 June 2009 (04.06.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/059,579 6 June 2008 (06.06.2008) US

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(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, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A NOVEL METHOD FOR MATRIX MINERALIZATION

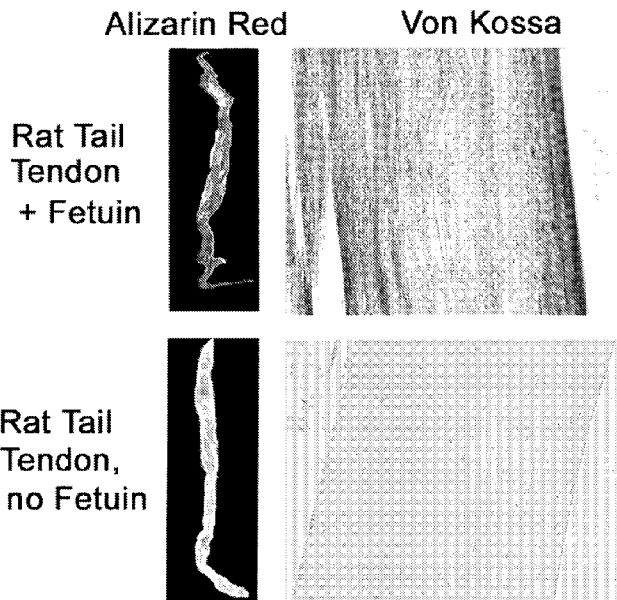


Fig 25

(57) Abstract: This invention provides novel methods for making mineralized matrices. In certain embodiments methods are provided for forming a crystalline phase within a defined liquid volume. The methods can involve combining a crystallization inhibitor; a solution that would, in the absence of the inhibitor, form the crystalline phase; and a semi-permeable barrier that excludes the inhibitor but allows the solution containing the constituents of the crystalline phase to enter, whereby a crystalline phase is formed within the liquid volume.

WO 2009/149295 A3



**Published:**

**(88) Date of publication of the international search report:**

4 March 2010

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**A. CLASSIFICATION OF SUBJECT MATTER**

**A61L 27/40(2006.01)i, A61L 27/30(2006.01)i, A61L 27/32(2006.01)i, A61C 13/08(2006.01)i, A61F 2/30(2006.01)i, A61B 17/86(2006.01)i**

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)

IPC: A61L 27/40, A61L 27/30, A61L 27/32, A61C 13/08, A61F 2/30, A61B 17/86, A61F 2/00, A61K 33/06, A61K 33/42

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 since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & keywords: inhibitor, fetuin, mineralization, crystal, calcium phosphate, apatite, hydroxyapatite, bone, matrix, implant, fluorapatite

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TOROIAN, DAMON et al., The size exclusion characteristics of type I collagen: implications for the role of noncollagenous bone constituents in mineralization, The Journal of Biological Chemistry, August 2007, Vol. 282, No. 31, Pages 22437-22447. See abstract, pages 22438-22440, 22443-22446	1-132
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A	US 6024985 A (SIMKISS, KENNETH and TAYLOR, MARINA GLORIA) 15 February 2000 See abstract, claim 1	1-132
A	US 2005/0152990 A1 (GOWER, LAURIE B. and OLSZTA, MATTHEW J.) 14 July 2005 See abstract, claim 1	1-132
A	US 2003/0152606 A1 (GERBER, THOMAS) 14 August 2003 See abstract, claim 1	1-132

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

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

"E" earlier application or patent but published on or after the international filing date

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"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

"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

"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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"&" document member of the same patent family


Date of the actual completion of the international search

12 JANUARY 2010 (12.01.2010)

Date of mailing of the international search report

**13 JANUARY 2010 (13.01.2010)**

Name and mailing address of the ISA/KR

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Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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Telephone No. 82-42-481-8404



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2009/046311**

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