



- (51) International Patent Classification:
A61L 27/14 (2006.01) A61L 27/40 (2006.01)
A61F 2/24 (2006.01)
- (21) International Application Number:
PCT/US2012/031417
- (22) International Filing Date:
30 March 2012 (30.03.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/078,774 1 April 2011 (01.04.2011) 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

[Continued on next page]

(54) Title: DURABLE HIGH STRENGTH POLYMER COMPOSITE SUITABLE FOR IMPLANT AND ARTICLES PRODUCED THEREFROM

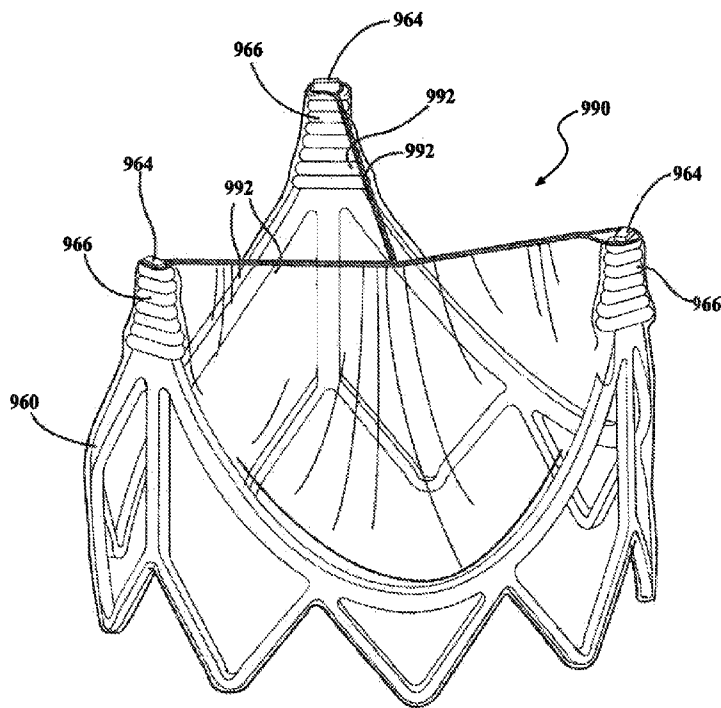


FIG. 23

(57) Abstract: A thin, biocompatible, high-strength, composite material is disclosed that is suitable for use in various implanted configurations. In one aspect, the composite material maintains flexibility in high-cycle flexural applications, making it particularly applicable to high-flex implants such as heart pacing lead or heart valve leaflet. The composite material includes a porous expanded fluoropolymer membrane and an elastomer, wherein the elastomer is present in substantially all of the pores of the porous expanded fluoropolymer, and the composite material comprising less than about 80% fluoropolymer by weight.





(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, 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))*
- *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))*

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

6 December 2012

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/031417**A. CLASSIFICATION OF SUBJECT MATTER***A61L 27/14(2006.01)i, A61F 2/24(2006.01)i, A61L 27/40(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)

A61L 27/14; A61F 2/24; A61F 2/06; A61F 1/22

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) & Keywords: implant, blood flow, leaflet, pore, fluoropolymer, PTFE, cushion, elastomer

C. 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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| A | US 04339831A A (JOHNSON; KEITH M.) 20 July 1982 See the whole document. | 1-49 |
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| A | US 7628803 B2 (PAVCHNIK DUSAN et al.) 08 December 2009 See the whole document. | 1-49 |

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

17 OCTOBER 2012 (17.10.2012)

Date of mailing of the international search report

18 OCTOBER 2012 (18.10.2012)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

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Telephone No. 82-42-481-5538



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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