



(51) International Patent Classification:

A61F 2/02 (2006.01) A61P 7/02 (2006.01)
A61F 2/06 (2013.01)

(21) International Application Number:

PCT/US2014/016568

(22) International Filing Date:

14 February 2014 (14.02.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/765,842 18 February 2013 (18.02.2013) US

(71) Applicant: **ELUTIN, INC.** [US/US]; 3800 Howard Hughes Parkway, Suite 500, Las Vegas, NV 89169 (US).

(72) Inventor: **COHEN, David, S.**; 3800 Howard Hughes Parkway, Suite 500, Las Vegas, NV 89169 (US).

(74) Agents: **SHARAREH, Shahnam** et al.; Fox Rothschild LLP, 997 Lenox Drive, Building 3, Lawrenceville, NJ 08648-2311 (US).

(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, BN, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

(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, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

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

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

29 October 2015

(54) Title: SITE SPECIFIC DRUG DELIVERY WRAPS

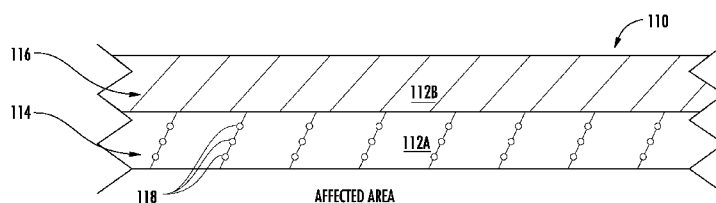


FIG. 2

(57) Abstract: This invention is directed to systems for the treatment of vasculature stenosis having an interior (adventitial) and exterior side (interstitial), wherein the interior and exterior sides are biodegradable and the interior side has an adhesive flexible, biodegradable matrix material and an antiproliferative agent, wherein the anti-proliferative agent is released from the matrix substantially following a unidirectional flow pattern towards the perivascular region, exerting biological activity on the vascular smooth muscle cells of the vascular wall and the size of the system can be customized for adhering to a vascular site of interest.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US14/16568

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61F 2/02, 2/06; A61P 7/02 (2014.01) USPC - 424/423; 604/19; 623/1.42 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(8) - A61F 2/00, 2/02, 2/06, 2/90; A61L 31/00; A61N 1/30; A61P 7/02, 9/00 (2014.01) USPC - 424/423, 445; 442/123; 600/407; 604/19; 623/1.42 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google Scholar; PubMed; IP.com; exterior wrap, perivascular, antiproliferative agent, circumvascular, biodegradable, periadventitial, adventitial side, wrap, sheath, mesh, biodegradable matrix, sirolimus, tacrolimus, everolimus, valsartan, rapamycin, hyperproliferation, drug releasing, implantable, unidirectional flow		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0091263 A1 (IYER, SS et al.) April 17, 2008; paragraphs [0003]-[0004], [0009], [0017], [0019], [0027]-[0038], [0054], [0056], [0063]-[0076]; claim 37	1-23
Y	KELLY, B et al. Perivascular Paclitaxel Wraps Block Arteriovenous Graft Stenosis in a Pig Model. Nephrology Dialysis Transplantation. Vol. 21. pages 2425-2431. 2006; page 2426, column 1, paragraph 1; column 2, paragraph 2	1-23
Y	US 6,991,804 B2 (HELMUS, MN et al.) January 31, 2006; column 16, lines 31-33; column 17, lines 28-32; column 24, lines 28-61; column 25, lines 10-14	15, 18-23
Y	US 8,263,102 B2 (LABRECQUE, R et al.) September 11, 2012; column 3, lines 61-65; column 7, lines 60-65	6, 17, 23
A	US 2008/0085855 A1 (GRAVETT, DM et al.) April 10, 2008; entire document	1-23
A	US 2008/0146489 A1 (PACETTI, SD et al.) June 19, 2008; entire document	1-23
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
* 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 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "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 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 23 April 2014 (23.04.2014)		Date of mailing of the international search report 22 AUG 2014
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774