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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 September 2006 (14.09.2006)

PCT

(10) International Publication Number
WO 2006/096251 A3

(51) International Patent Classification:
A61F 2/06 (2006.01)

(21) International Application Number:
PCT/US2006/002741

(22) International Filing Date: 24 January 2006 (24.01.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/658,226	3 March 2005 (03.03.2005)	US
60/694,881	29 June 2005 (29.06.2005)	US
60/694,891	29 June 2005 (29.06.2005)	US
60/739,688	23 November 2005 (23.11.2005)	US

(71) Applicant *(for all designated States except US)*: **ICON MEDICAL CORP.** [US/US]; Suite 309, 1414 South Green Road, Cleveland, Ohio 44121 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PATEL, Udayan** [US/US]; 6508 Deer Hollow Drive, San Jose, California 95120 (US). **FURST, Joseph, G.** [US/US]; 4948 Corliss Drive, Lyndhurst, Ohio 44124 (US). **BUCKMAN, Raymond, W., JR.** [US/US]; 272 Picture Drive, Pittsburgh, Pennsylvania 15236 (US).

(74) Agent: **TURUNG, Brian, E.**; Fay, Sharpe, Fagan, Minnich & McKee, LLP, 1100 Superior Avenue, 7th Floor, Cleveland, Ohio 44114-2579 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
30 April 2009

(54) Title: IMPROVED METAL ALLOYS FOR MEDICAL DEVICE

(57) Abstract: A medical device that is at least partially formed of a novel metal alloy, which novel metal alloy improves the physical properties of the medical device.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/02741

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **A61F 2/06**(2006.01);**A61L 33/00**(2006.01);**B22F 1/00**(2006.01),**3/00**(2006.01),**3/12**(2006.01),**3/24**(2006.01),**7/00**(2006.01);**B23P 13/00**(2006.01),**15/00**(2006.01),**17/00**(2006.01),**25/00**(2006.01);**C22C 27/00**(2006.01),**27/04**(2006.01)

USPC: Please See Continuation Sheet

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)
U.S. : 29/417,458,527.2,557,558;148/423;419/5,6,26,28,29,38;420/429,433;427/2.1,2.24;623/1.15,1.42,1.43,1.46,901

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Derwent: B11-C04A1, C11-C04A, D09-C01, M26-B13

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/0049261 A1 (Xu) 11 March 2004 (11.04.2004), para 8,19,20, 27	1-36
Y	MUELLER, A.J. et al. Evaluation of oxide dispersion strengthened (ODS) molybdenum and molybdenum-rhenium alloys B-T-3148 (1999), p. 1-18. see p. 2,3, 11, Fig. 2	1-36
Y	US 5,437,744 (Carlen) 1 August 1995 (08.01.1995) col. 2, lines 15-40	2
Y	KLOPP, W.D. Technology status of molybdenum and tungsten alloys, Space Nuclear Power Systems, chapter 42, 1984, p. 359-369, see p. 351, p. 364, col. 2, p. 367, col. 1	4, 5, and 7
Y	US 5,609,629 (FEARNOT et al.) 11 March 1997 (11.03.1997) Abstract, col. 3, line 3	11-16 and 19-25
Y	US 6,334,856 (ALLEN et al.) 1 January 2002 (01.01.2002) Abstract, col. 15, lines 33-47, col. 16, lines 22-31, 46-65, col. 19, lines 3-14	17-18 and 26-28
Y	US 6,253,443 B1 (JOHNSON) 03 July 2001 (03.07.2001) col. 2, line 7 - col. 3, line 64	29-36

☒ 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

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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

"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	Date of mailing of the international search report
21 April 2008 (21.04.2008)	05 JUN 2008
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 Roy V. King Telephone No. (571) 272-1700

Form PCT/ISA/210 (second sheet) (April 2007)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/02741

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,252,288 (YAMAMOTO et al). 12 October 1993 (12.10.1993) col. 7, col. 8	29-36

Continuation of B. FIELDS SEARCHED Item 1:
29/417,458,527.2,557,558;148/423;419/5,6,26,28,29,38;420/429,433;427/2.1,2.24,1.43,1.46,901;623/2.1,2.24,1.43,1.46,901

Continuation of B. FIELDS SEARCHED Item 3:
Ullmann's Encyclopedia of Industrial Chemistry, Kirk-Othmer Encyclopedia, ASM Handbook
Scirus: Mo-Re(Ti,Zr,Y) alloys

Continuation of USPC:
29/417,458,527.2,557,558;148/423;419/5,6,26,28,29,38;420/429,433;427/2.1,2.24;623/1.15,1.42,1.43,1.46,901