

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 September 2008 (18.09.2008)

PCT

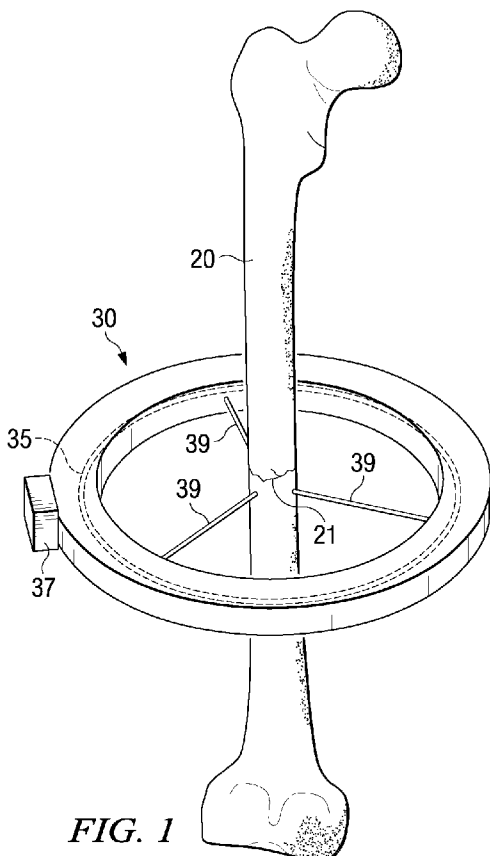
(10) International Publication Number
WO 2008/112853 A3

- (51) International Patent Classification:
A61N 1/00 (2006.01) A61F 5/00 (2006.01)
- (21) International Application Number:
PCT/US2008/056791
- (22) International Filing Date: 13 March 2008 (13.03.2008)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/894,956 15 March 2007 (15.03.2007) 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, 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, 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,

[Continued on next page]

(54) Title: ENCOMPASSING EXTERNAL FIXATION DEVICE WITH INCORPORATED PEMF COIL



(57) Abstract: The disclosed embodiments reveal an external fixation frame that encompasses an injured body part, having an integrated PEMF coil. The frame supports and stabilizes the injured body part, while the coil generates a PEMF signal that encompasses the injured body part. Working together, these elements speed the healing process for bone fractures and soft tissue injuries. Variants may be designed to specifically treat particular body parts. By way of example, one disclosed embodiment employs geometry that encompasses the foot, focusing the PEMF field on the rear and mid-foot regions to aid in treatment of Charcot Foot.

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FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, 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).

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*

Published:

— *with international search report*

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

30 October 2008

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/56791

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61N 1/00; A61F 5/00 (2008.04) USPC - 607/3, 606/54 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) - A61N 1/00; A61F 5/00 (2008.04) USPC - 607/3, 606/54 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched 606/32 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar; Search Terms Used: PEMF, pulsed electromagnetic, electromagnetic therapy, external\$ fixat\$, foot, ring, half-ring, parabol\$, parallel ring, carbon fiber, mold, resin, moldable		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,678,562 B1 (TEPPER et al.) 13 January 2004 (13.01.2004) Entire document, especially col 2, ln 12-15, col 4, ln 54-56, col 12, ln 1-6 and FIG. 4B.	1, 2, 4, 12, 13, 15 & 20-23
Y		3, 5-11, 14 and 16-19
Y	US 2002/0004659 A1 (BOUDARD et al.) 10 January 2002 (10.01.2002) para[0001], para[0032] and FIG. 2.	3 and 14
Y	US 2003/0191466 A1 (AUSTIN et al.) 09 October 2003 (09.10.2003) para[0011] and FIG. 2.	5
Y	US 4,624,249 A (ALVAREZ) 25 November 1986 (25.11.1986) Abstract and FIG. 1.	6 and 7
Y	US 2005/0059968 A1 (GRANT et al.) 17 March 2005 (17.03.2005) para[0007] and FIGS. 2, 5 and 6.	8-11 and 16-19
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* Special categories of cited documents:		
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		document member of the same patent family
Date of the actual completion of the international search		Date of mailing of the international search report
16 August 2008 (16.08.2008)		22 AUG 2008
Name and mailing address of the ISA/US		Authorized officer:
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Lee W. Young
		PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774