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[Continued on next page]

(54) Title: FIBER-REINFORCED COMPOSITE ORTHOPAEDIC DEVICE HAVING EMBEDDED ELECTRONICS

(57) Abstract: In one general aspect, an orthopaedic fixation device includes an inner core and shaft formed of a multi-layered, fiber-reinforced composite. A sensing element is embedded within the multi-layered, fiber-reinforced composite.

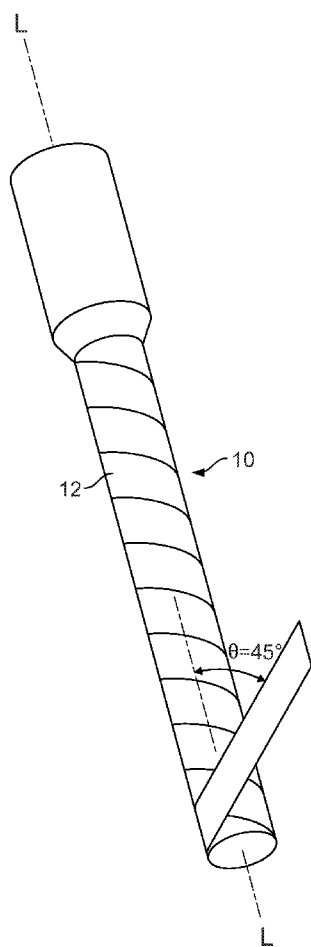


FIG. 1



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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/046659**A. CLASSIFICATION OF SUBJECT MATTER***A61F 5/01(2006.01)i, A61F 5/05(2006.01)i, A61F 5/04(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)

A61F 5/01; G01B 7/16; NotA vai/lable; A61B 17/58; A61B 17/86; A61B 5/103

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:orthopaedic, fiber-reinforced, sensing element.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2010-045473 A2 (SMITH & NEPHEW, INC. et al.) 22 April 2010	1-9, 14-16
Y	See abstract; claims 1, 11, 13; paragraphs [123], [125].	10-13, 17, 18
Y	US 2011-0152725 A1 (DEMIR HILMI VOLKAN et al.) 23 June 2011 See abstract; paragraphs [75]-[80].	10-13, 17, 18
A	WO 2005-120203 A2 (MORGAN, CHAD et al.) 22 December 2005 See abstract; paragraphs [0005],[0044]; claims 1, 24	1-18



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

29 JANUARY 2013 (29.01.2013)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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