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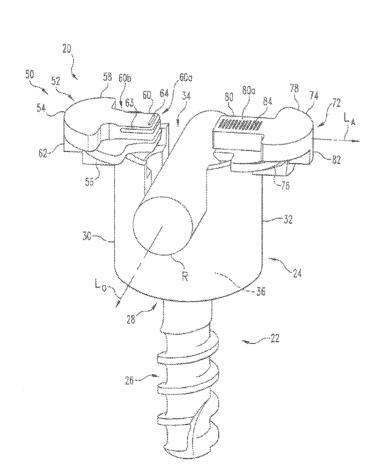
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[Continued on next page]

(54) Title: ORTHOPEDIC IMPLANT ASSEMBLY



(57) Abstract: Embodiments of an orthopedic implant assembly include an apparatus having a receiver member (24) and a fixation member (22). The receiver member includes first and second branches (30, 32) which define a channel (34) extending along a longitudinal axis. The channel is configured to receive an elongated member. Additionally, the fixation member can include a threaded portion configured to engage bone. The orthopedic implant system can further include a one-step locking mechanism (50) operably connected with the receiver member, the locking mechanism being configured to lock an elongated member m the channel. The locking mechanism includes a first closure device operably connected with the first branch and a second closure device operably connected with the second branch. The first and second closure devices are configured to cooperate with each other along a lateral axis to lock an elongated member in the channel. In certain embodiments, the lateral axis does not intersect the longitudinal axis.



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PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. A61B17/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ A61B \end{tabular}$

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 practical, search terms used)

EPO-Internal

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Χ .	US 4 805 602 A (PUNO ROLANDO M [US] ET AL) 21 February 1989 (1989-02-21) figures 7,8 column 6, line 6 - line 16	1-4,9,12
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A	EP 0 330 881 A (SYNTHES AG [CH]) 6 September 1989 (1989-09-06) figures 1,3,5 column 2, line 42 - line 45	6

X Further documents are listed in the continuation of Box C.	X . 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 "E" earlier document 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	Date of mailing of the international search report
9 July 2008	28/07/2008
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Authorized officer Josten, Stefan

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INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/080361

		PC1/US200//080361			
C(Continua					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
Α .	US 2003/187434 A1 (LIN CHIH-I [US]) 2 October 2003 (2003-10-02) figures 8,9 paragraph [0036]	10			
A	US 6 896 677 B1 (LIN CHIH-I [TW]) 24 May 2005 (2005-05-24) figures 1,4 column 3, line 30 - line 37	10			
A _.	US 2004/097933 A1 (LOURDEL RODOLPHE [FR] ET AL) 20 May 2004 (2004-05-20) figures 1,2 paragraphs [0009], [0023], [0048]	9,19			
A .	FR 2 853 522 A (HUITEMA JEAN PIERRE [FR]) 15 October 2004 (2004-10-15) figures 1-4 page 1, line 28 - page 2, line 26	19			
A	EP 1 190 678 A (DEPUY ACROMED INC [US] DEPUY SPINE INC [US]) 27 March 2002 (2002-03-27) figures 5-7	19			

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INTERNATIONAL SEARCH REPORT

Box No. I! Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
1. X As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
X No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8

An apparatus comprising a receiver portion, a fixation portion and a locking mechanism including a first closure device and a second closure device, wherein said first closure device is configured to slide together with said second closure device along a lateral axis to lock an elongated member in a channel of the receiver portion.

2. claims: 9-18

A multi-axial bone-engaging anchor assembly comprising a receiver member, a bone-engaging anchor and a closure mechanism, wherein said receiver member defines a lower opening portion and said anchor having a head, the width of said head being smaller than the minimum width of said lower opening portion.

3. claims: 19-28

An apparatus comprising a fixation element, a receiver member and a clipping mechanism, wherein said clipping mechanism includes a first clipping assembly including a clip member having a hollow portion and a second clipping assembly including a clip member having an extension portion, with said extension portion configured to be at least partially received in said hollow portion.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/080361

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