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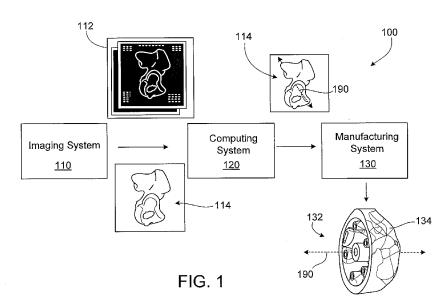
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(54) Title: IMPLANT ALIGNMENT



(57) Abstract: Methods, systems, and apparatus for implant alignment are described. For example, a method of defining an alignment axis can include accessing a model representing a ball and socket joint, the model being derived from imaging data for the joint. A portion of the model representing a socket portion of the joint can be identified. A substantially spherical approximation of the identified portion can be generated. A location corresponding to the center of the substantially spherical approximation can be identified. An axis that intersects the identified location can be defined relative to the model.



International application No. **PCT/US2011/047671**

A. CLASSIFICATION OF SUBJECT MATTER

A61F 2/46(2006.01)i, A61B 5/107(2006.01)i, A61F 2/30(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 2/46; G06G 7/48; A61B 19/00; A61B 17/58; G06K 9/00; A61B 5/00

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: axis, computer, joint, prosthesis

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010-0030231 A1 (REVIE et al.) 04 February 2010 See abstract, claims 24, 27, 28, 37, 38, paragraph [0073].	1-15
X	US 2008-0319448 A1 (LAVALLEE et al.) 25 December 2008 See abstract, claims 1-4, paragraphs [0036],[0053],[0054].	1-15
X	US 2008-0312663 A1 (HAIMERL et al.) 18 December 2008 See abstract, claims 1, 4, 10, 22, 38.	1-15
X	US 05682886A A (DELP et al.) 04 November 1997 See abstract, claims 1, 21, 29, 41, 42, column 11.	1-15

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l	Further documents are	11-4-11-4	1	- f D O
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See patent family annex.

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- "&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

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PCT/US2011/047671

	Information on patent family members		U S2011/04767 1
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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