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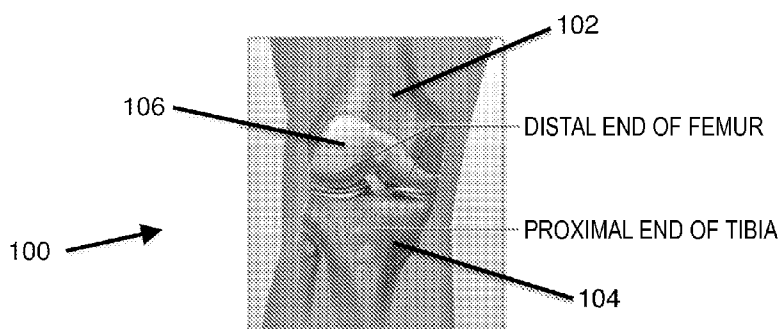


FIG. 1

(57) Abstract: Systems and methods for providing alignment in total knee arthroplasty operations are provided herein. The systems and methods generally include a plurality of sensors coupled to a patient's bones or other surgical tools, the sensors detect their position and orientation in space and communicate this information to a processor. The processor can utilize the information to display data to a surgeon or other user regarding the position, angle, and alignment of a patient's bones, surgical tools, and the reconstructed knee joint.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06K 9/00, 9/20, 9/36 (2014.01)

USPC - 345/419, 619; 348/580; 382/128, 132, 276

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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 practicable, search terms used)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google; Google Scholar; Google Patent; ProQuest; PubMed/Medline; Search Terms Used; femur, tibia, bone, "knee arthroplasty", sensor, transducer, telemetry, wireless*, marker, probe, pointer, pin, indicator, guide, jig, "processing unit", computer, processor, "electronic unit", CPU, PC, microprocessor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/0064216 A1 (BORJA, SP et al.) March 11, 2010; figures 1, 3A-3B, 11, 20, 43;	1-2, 6, 9-12, 14-18, 20-22
--	paragraphs [0009], [0011]-[0015], [0095], [0102]-[0106], [0110], [0119], [0135]-[0137], [0184],	
Y	[0203], [0272], [0332], [0335], [0339], [0355]-[0356], [0359]-[0360]	3-5, 7-8, 13, 19
Y	US 2007/0186738 A1 (MCGINLEY, SE et al.) August 16, 2007; figure 13; paragraph [0036]	3-4
Y	US 2009/0204222 A1 (BURSTEIN, A et al.) August 13, 2009; claims 40-41, 43	5, 13, 19
Y	US 2010/0312350 A1 (BONUTTI, PM) December 9, 2010; figures 9-10; paragraph [0191]	7-8

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