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(54) Title: PROSTHETIC KNEE JOINT

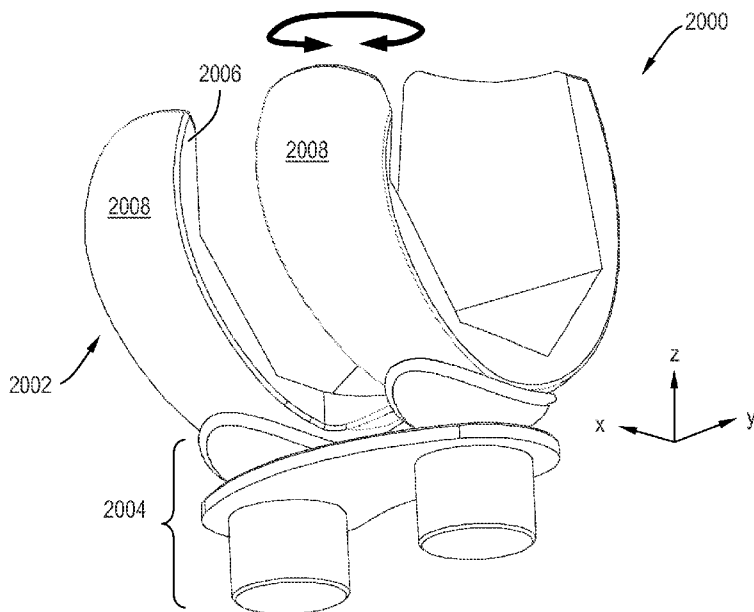


FIG. 39

(57) Abstract: A prosthetic knee joint includes: (a) a femoral member comprising rigid material with a convex, wear-resistant femoral contact surface including a convex ridge; (b) a tibial assembly including: (i) a cup comprising rigid material with a body and a rim substantially thicker than the body defining a wear-resistant cup contact surface; (ii) a rigid base; and (iii) a spring support interconnecting the cup and the base, the spring support elastically deflectable permitting controlled pivoting of the at least one cup; (c) wherein the cup contact surface bears against the femoral contact surface, transferring axial and lateral loads between the cup and femoral member, while allowing pivoting between the cup and femoral member; and (d) wherein the at least one cup allows the rim to deform elastically, permitting the cup contact surface to conform in an irregular shape to the femoral contact surface, when the knee joint is loaded.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/067907**A. CLASSIFICATION OF SUBJECT MATTER***A61F 2/64(2006.01)i, A61F 2/38(2006.01)i, A61L 27/10(2006.01)i, A61L 27/04(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 2/64; A61F 2/08; A61F 2/28; A61F 2/36; A61F 2/38; A61B 17/58; A61F 2/32

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: prosthetic, knee, joint, femoral, tibia, base, spring, elastic, cup, pivot

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2158879 A1 (MMK CONSULTING GMBH) 03 March 2010 See abstract; paragraphs [0023],[0031]-[0038]; figures 4,6; claims 1-15.	1-13
A	US 2009-0222089 A1 (HAURI, T. & STIFTER, J.) 03 September 2009 See abstract; figures 1,2,6; claims 31-70.	1-13
A	US 2006-0064169 A1 (FERREE, B. A.) 23 March 2006 See abstract; figures 1,10; claims 1-23.	1-13
A	US 7309363 B2 (DIETZ, T. L.) 18 December 2007 See abstract; figures 1,2; claims 1-16.	1-13

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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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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