

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 March 2011 (10.03.2011)

(10) International Publication Number
WO 2011/028624 A1

PCT

(51) International Patent Classification:
A61F 2/38 (2006.01)

(21) International Application Number:
PCT/US2010/046868

(22) International Filing Date:
26 August 2010 (26.08.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/275,174 26 August 2009 (26.08.2009) US
61/280,493 4 November 2009 (04.11.2009) US
61/284,458 18 December 2009 (18.12.2009) US
PCT/US10/025459
25 February 2010 (25.02.2010) US
61/339,766 9 March 2010 (09.03.2010) US
PCT/US10/039587 23 June 2010 (23.06.2010) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: PATIENT-SPECIFIC ORTHOPEDIC IMPLANTS AND MODELS

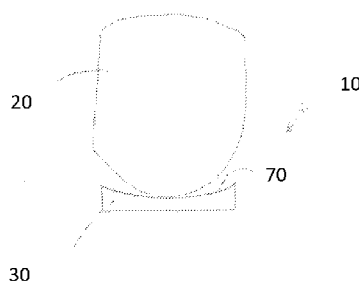


FIG. Ex 10-1A

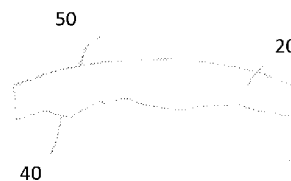


FIG. Ex 10-1B

(57) Abstract: A patient-specific knee implant 10 includes a femoral component 20 and a tibial tray component 30, and it is designed based on patient-specific data. An inner, bone-facing surface 40 of the femoral component 20 conforms to the corresponding surface of the femoral condyle. Alternatively, it can conform to one or more optimized bone cuts on the femoral condyle. However, the outer, articular surface 50 of the component 20 is enhanced to incorporate a smooth surface having a nearly constant radius in the coronal plane. The corresponding articular surface 70 of the tibial tray 30 has a surface contour in the coronal plane that is matched to the outer articular surface 50. In certain embodiments, the articular surface 50 of the component 20 incorporates a sagittal curvature that positively-matches the patient's existing or healthy sagittal radius.



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