

Title (en)

COMPUTER-ASSISTED LIGAMENT BALANCING IN TOTAL KNEE ARTHROPLASTY

Title (de)

COMPUTERGESTÜTZTER BÄNDER AUSGLEICH BEI DER TOTAL-KNIEARTHROPLASTIK

Title (fr)

EQUILIBRAGE LIGAMENTAIRE ASSISTE PAR ORDINATEUR DANS L'ARTHROPLASTIE TOTALE DU GENOU

Publication

EP 1838226 A1 20071003 (EN)

Application

EP 05705775 A 20050118

Priority

US 2005001354 W 20050118

Abstract (en)

[origin: WO2006078236A1] Systems, methods and processes for computer-assisted soft tissue balancing, including ligament balancing, determining surgical cuts, and positioning or placement of the components of the prosthetic knee during TKR. The improved methods, systems, and processes consider and correlate anatomical landmarks and dynamic interactions of the knee bones and soft tissues. The improved methods, systems and processes resolve several problems related to the prosthetic knee component positioning and soft-tissue balancing during computer-assisted TKR. The improved methods, systems and processes are flexible and versatile, provide reliable recommendations to the surgeon, and improve restoration of the knee function and patient recovery. The computer stores in its memory a logic matrix for assessing kinematics of the knee, and provides output in the form of recommendations on soft tissue balancing.

IPC 8 full level

A61B 17/15 (2006.01)

CPC (source: EP)

A61B 5/064 (2013.01); **A61B 5/1076** (2013.01); **A61B 5/1107** (2013.01); **A61B 5/4533** (2013.01); **A61B 17/154** (2013.01); **A61B 5/4528** (2013.01); **A61B 5/6828** (2013.01); **A61B 17/155** (2013.01); **A61B 17/157** (2013.01); **A61B 34/10** (2016.02); **A61B 2505/05** (2013.01)

Citation (search report)

See references of WO 2006078236A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006078236 A1 20060727; AU 2005325289 A1 20060727; CA 2594874 A1 20060727; EP 1838226 A1 20071003; JP 2008526427 A 20080724

DOCDB simple family (application)

US 2005001354 W 20050118; AU 2005325289 A 20050118; CA 2594874 A 20050118; EP 05705775 A 20050118; JP 2007551238 A 20050118