

Patent No. 6,205,411
Petition For *Inter Partes* Review

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Mako Surgical Corp.
Petitioner

v.

Blue Belt Technologies, Inc.
Patent Owner

Patent No. 6,205,411
Issue Date: March 20, 2001
Title: COMPUTER-ASSISTED SURGERY PLANNER AND
INTRA-OPERATIVE GUIDANCE SYSTEM

Case IPR: Unassigned

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,205,411

UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. §§ 42.1-.80, 42.100-.123

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A. DiGioia.	10
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Exhibit List for *Inter Partes* Review of U.S. Patent No. 6,205,411

Exhibit Description	Exhibit #
U.S. Patent No. 6,205,411 (“the ’411 patent”)	1001
Prosecution History of U.S. Patent No. 6,205,411	1002
Prosecution History of U.S. Patent No. 5,880,976	1003
Declaration of Robert D. Howe	1004
A.M. DiGioia et al., “HipNav: Pre-operative Planning and Intra-operative Navigational Guidance for Acetabular Implant Placement in Total Hip Replacement Surgery,” 2nd CAOS Symposium, 1996 (“DiGioia”)	1005
Anthony M. DiGioia III et al., “An Integrated Approach to Medical Robotics and Computer Assisted Surgery in Orthopaedics,” <i>Proc. 1st Int’l Symposium on Medical Robotics and Computer Assisted Surgery</i> , pp. 106-111, 1995 (“DiGioia II”)	1006
E.Y.S. Chao et al., “Simulation and Animation of Musculoskeletal Joint System,” <i>Transactions of the ASME</i> , Vol. 115, pp. 562-568, Nov. 1993 (“Chao”)	1007
R.V. O’Toole III et al., “Towards More Capable and Less Invasive Robotic Surgery in Orthopaedics,” <i>Computer Vision, Virtual Reality and Robotics in Medicine Lecture Notes in Computer Science</i> , Vol. 905, pp. 123-130, 1995 (“O’Toole”)	1008
Russell H. Taylor et al., <i>An Image-Directed Robotic System for Precise Orthopaedic Surgery</i> , <i>IEEE Transactions on Robotics and Automation</i> , Vol. 10, No. 3, June 1994 (“Taylor”)	1009

Petitioner Mako Surgical Corp. (“Petitioner”) respectfully petitions for *inter partes* review of claims 1-17 (the “Challenged Claims”) of U.S. Patent No. 6,205,411 (“the ’411 patent”) (Ex. 1001) in accordance with 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42.100 *et seq.*

I. NOTICES AND STATEMENTS

Pursuant to 37 C.F.R. § 42.8(b)(1), Petitioner identifies Mako Surgical Corp. and Stryker Corporation as the real parties-in-interest. Pursuant to 37 C.F.R. § 42.8(b)(2), Petitioner discloses as a related matter *Mako Surgical Corp. v. Blue Belt Technologies, Inc.*, No. 0:14-cv-61263-MGC (S.D. Fla.) (the “Concurrent Litigation”). Blue Belt Technologies, Inc. (“Patent Owner”) served Petitioner with counterclaims asserting infringement of the ’411 patent on September 2, 2014.

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Pursuant to 37 C.F.R. § 42.8(b)(4), service information for lead and back-up counsel is provided above. Pursuant to 37 C.F.R. § 42.104(a), Petitioner certifies that the ’411 patent is available for *inter partes* review and that the Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent

claims on the grounds identified in this Petition.

II. INTRODUCTION

The '411 patent was filed on November 12, 1998. It has three independent claims and 14 dependent claims, all directed to methods and systems for planning and guiding implantation of an artificial component into a joint (hip, knee, hand and wrist, elbow, shoulder, or foot and ankle). The same systems and methods, however, were described in detail by several of the named inventors in articles published at least as early as 1996 and 1995, both well over a year before the '411 patent was filed. As a result, the '411 patent claims are unpatentable.

The '411 patent is a continuation-in-part of an application filed February 21, 1997, which issued as U.S. Patent No. 5,880,976 (“the '976 patent”). The independent claims of the '411 patent, however, specifically recite implantation in “a hip joint, a knee joint, a hand and wrist joint, an elbow joint, a shoulder joint, [or] a foot and ankle joint.” Other than the hip joint, this is new matter with no support in the parent application, as the parent merely disclosed a “joint” and only specifically discussed a hip joint. This new matter is included in each claim that remains in the '411 patent. All of the claims are therefore entitled only to their actual filing date of November 12, 1998.

The Examiner’s views on priority are unclear from the prosecution history.

In an April 5, 2000, office action, the Examiner stated that because the scope of the

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