IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of: BONUTTI	§
	§
U.S. Patent No. 7,112,179	§ Petition for <i>Inter Partes</i> Review
1 0 1 0 2000	§
Issued: September 26, 2006	\$ 8 August D. 1 a No. 026027 0000
T'I OPTIVOGIA	§ Attorney Docket No.: 026027.0000
Title: ORTHOSIS	§ Customer No.: 111393
	§ Real Party in Interest: Lantz Medical, Inc.
	§

PETITION FOR INTER PARTES REVIEW

Pursuant to the provisions of 35 U.S.C. §§ 311-319, Lantz Medical, Inc. ("Petitioner") hereby petitions the Patent Trial and Appeal Board to institute an *inter partes* review of Claim 26 of United States Patent No. 7,112,179 ("the '179 Patent") (Exhibit 1001) that issued on September 6, 2006 to Boris P. Bonutti, Peter M. Bonutti, and Kevin R. Ruholl, resulting from U.S. Patent Application No. 10/795,892, filed on March 8, 2004. According to USPTO records, the '179 Patent is currently assigned to Bonutti Research, Inc. ("Patentee").

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I. COMPLIANCE WITH REQUIREMENTS FOR A PETITION FOR INTER PARTES REVIEW

A. Certification that U.S. Patent No. 7,112,179 May Be Contested by Petitioner

Petitioner certifies it is not barred or estopped from requesting *inter partes* review of U.S. Patent No. 7,112,179 (the '179 patent) (Exhibit 1001). Neither Petitioner, nor any party in privity with Petitioner, has filed a civil action challenging the validity of any claim of the '179 patent. The '179 patent has not been the subject of a prior *inter partes* review by Petitioner or a privy of Petitioner.

Petitioner also certifies that this petition for *inter partes* review ("IPR") is filed within one year of the date of service of a Complaint (Exhibit 1003) alleging infringement of a patent. Petitioner was served with a complaint alleging infringement of the '179 patent on April 22, 2014, which led to *Bonutti Research*, *Inc. et al v. Lantz Medical, Inc.*, Civil Action No. 1:14-cv-00609, in the United States District Court, Southern District of Indiana.

Because the date of this petition is less than one year from April 22, 2014, this petition complies with 35 U.S.C. § 315(b).

B. Fee for Inter Partes Review (§ 42.15(a))

The Director is authorized to charge the fee specified by 37 CFR § 42.15(a) to Carson Boxberger LLP's Deposit Account No. 506567.

C. Mandatory Notices (37 CFR § 42.8(b))

1. Real Party in Interest (§ 42.8(b)(1))

The real party in interest of this petition pursuant to § 42.8(b)(1) is Lantz Medical, Inc. ("Lantz") located at 7750 Zionsville Road, #800, Indianapolis, Indiana 46268.

2. Other Proceedings ($\S 42.8(b)(2)$)

The '179 patent is not the subject of any civil actions other than the aforementioned, *Bonutti Research, Inc. et al v. Lantz Medical, Inc.* (Civil Action No. 1:14-cv-00609). However, contemporaneously with this filing, Petitioner is filing requests for IPR of U.S. Patent Nos. 7,404,804, Claim 1; 7,955,286, Claims 26-31 and 33; and 8,784,343, Claims 1-4.

3. Designation of Lead and Backup Counsel

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4. Service Information $(\S42.8(b)(4))$

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Service may be made by mail or hand delivery to Backup Counsel, Cedric D'Hue at D'Hue Law LLC, P.O. Box 421972, Indianapolis, IN 46242-1972. Mr. D'Hue's fax number is (202) 446-2951.

II. RELIEF REQUESTED

Petitioner requests IPR of Claim 26 of the '179 patent on the grounds set forth below and requests that the Claim be found unpatentable. An explanation of how Claim 26 is unpatentable is provided below, including where each element can be found in the prior art publications and the relevant prior art references.

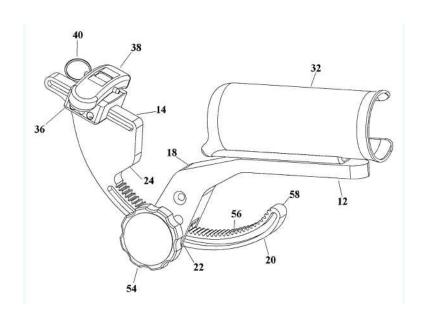
III. IDENTIFICATION OF CLAIM BEING CHALLENGED (§ 42.104(b))

Claim 26 of the '179 patent is unpatentable because it is anticipated pursuant to 35 U.S.C. § 102(a) and (b), in view of U.S. Patent No. 5,759,165 (Exhibit 1009),

issued on June 2, 1998; and U.S. Patent No. 2,832,334 (Exhibit 1010), issued on April 29, 1958. Both patents were issued more than one year before the earliest effective filing date of the '179 patent, and Patentee failed to cite both of these references to the USPTO during prosecution of the '179 patent.

Petitioner's proposed construction of the contested claims, the evidence relied upon, and the precise reasons why the claims are unpatentable are provided below. The evidence relied upon in this petition is attached and listed in the attached List of Exhibits.

IV. BACKGROUND INFORMATION ON THE '179 PATENT



The '179 patent issued from U.S. Patent Application Serial Number 10/795,892. The earliest effective filing date of the '179 patent is March 8, 2004. The '179 patent includes four independent claims and twenty-four claims

dependent from those independent claims. The independent claim at issue is Claim 26 (originally filed as claim 16). During prosecution, the Claim was considered to be allowable if changed to independent form. In response, the Claim was changed to independent form.

Claim 26 of the '179 Patent states, "[a]n orthosis for stretching tissue around a joint of a patient between first and second relatively pivotable body portions, comprising: a first arm member affixable to the first body portion and including a first extension member extending therefrom; a second arm member affixable to the second body portion and including a second extension member having an arcuate shape extending therefrom, the second extension member is operatively connected to the first extension member and travels along an arcuate path through the first extension member when the second arm member is moved from a first position to a second position relative to the first arm member; and a hand pad attached to the second arm member, wherein the hand pad is slidably mounted to the second arm member."

V. DEFINITION OF A PERSON OF ORDINARY SKILL IN THE ART

"A person of ordinary skill in the art at the time of the invention of the . . . ['179 patent] . . . would be an occupational therapist, physical therapist, mechanical engineer, and/or biomedical engineer with three to five years of experience designing or evaluating the design of orthotics." (Exhibit 1005, page 4)

VI. LEGAL STANDARD FOR CLAIM CONSTRUCTION IN AN IPR

A claim subject to IPR is given its "broadest reasonable construction in light of the specification of the patent in which it appears." 37 C.F.R. § 42.100(b). The broadest reasonable construction should be determined, in part, by taking into account the subject matter Patentee contends infringes the claims and the constructions Patentee has advanced in litigation. Also, if Patentee contends terms in the claims should be read to have a special meaning, those contentions should be disregarded unless Patentee also amends the claims compliant with 35 U.S.C. § 112 to make them expressly correspond to those contentions. *See* 77 Fed. Reg. 48764 at II.B.6 (August 14, 2012); cf. *In re Youman*, 679 F.3d 1335, 1343 (Fed. Cir. 2012).

Thus, Petitioner suggests, for the sake of rational analysis only, that the "broadest reasonable" construction to be applied in this proceeding for these limitations is at least as broad as what Patentee is asserting in the pending litigation. For this reason, except where indicated otherwise, Petitioner presents below the proposed claim constructions urged by the Patentee in the above referenced patent litigation matter.

VII. CONSTRUCTION OF TERMS OF CLAIM 26 IN THE '179 PATENT

A. "orthosis for stretching tissue around a joint of a patient between first and second relatively pivotable body portions"

Dr. Rogge opines that "one of ordinary skill in the art at the time of the invention would have readily understood that the term 'orthosis' would indicate 'an external orthopedic appliance, as a brace or splint that prevents or assists movement of the spine or limbs." Dr. Rogge further opines that the phrase "for stretching tissues around a joint of a patient . . . serves to clarify the function of the 'orthosis' for the patent, but does not redefine the term to mean 'a device designed or constructed to stretch tissue around a joint." (Exhibit 1005, page 14)

B. "first extension member"

In the above referenced litigation, Patentee's expert argues that the phrase "first extension member," if it is to be construed at all, should mean "a part that extends, or extends from, the first arm member." (Exhibit 1006, page 21)

C. "second extension member having an arcuate shape extending therefrom"

In the above referenced litigation, Patentee's expert argues that if the phrase "second extension member having an arcuate shape extending therefrom" is to be

construed at all, it should mean "a part that extends, or extends from, the second arm member, at least a portion of which is curved like a bow or a circle." (Exhibit 1006, page 23)

D. "arcuate shape"

In the above referenced litigation, Patentee's expert argues that if the phrase, "acruate shape," is to be construed at all, it should mean "curved like a bow or a circle." (Exhibit 1006, page 25)

E. "arcuate path"

In the above referenced litigation, Patentee's expert argues that if the phrase "arcuate path" is to be construed at all, it should mean "a bow or circular shaped path." (Exhibit 1006, page 26)

F. "travels along an arcuate path through the first extension member"

In the above referenced litigation, Patentee's expert argues that if the phrase, "travels along an arcuate path through the first extension member," is to be construed at all, it should mean "travels along a bow or circular shaped path and passes through the first extension member." (Exhibit 1006, page 28)

VIII. CLAIM CHART FOR '179 PATENT

Claim 26	Prior Art Reference
26. An orthosis for stretching tissue around a joint of a patient between first and second relatively pivotable body portions, comprising:	 U.S. Patent 5,759,165 (Abstract) U.S. Patent 2,832,334 (Title)
a first arm member affixable to the first body portion	 U.S. Patent 5,759,165 (Col. 3, Lines 20-21; Fig. 3(20)) U.S. Patent 2,832,334 (Col. 2, Lines 14-15; Fig. 1(11))
and including a first extension member extending therefrom	 U.S. Patent 5,759,165 (Col 3, Lines 20-21; Fig. 3(22)) U.S. Patent 2,832,334 (Col. 3, Lines 36-37; Fig. 1(28))
a second arm member affixable to the second body portion	 U.S. Patent 5,759,165 (Col. 4, Lines 26-27; Fig. 3(46)(48)) U.S. Patent 2,832,334 (Col. 2, Lines 14-15; Fig. 1(10); Fig. 2(10))
and including a second extension member having an arcuate shape extending therefrom,	 U.S. Patent 5,759,165 (Col. 4, Lines 52-57; Col. 5, Lines 1-10; Figs. 5, 6, and 7(56)) U.S. Patent 2,832,334 (Fig. 1(29); Fig. 2(29); Fig. 3(29); Fig. 4(29))
the second extension member is operatively connected to the first extension member and travels along an arcuate path through the first extension member when the second arm member is moved from a first position to a second position relative to the first arm member;	 U.S. Patent 5,759,165 (Col. 5, Lines 1-2; Fig. 5(c)) U.S. Patent 2,832,334 (Col. 3, Lines 14-17; Figs. 1, 2, and 3)

and a hand pad attached to the second arm member, wherein the hand pad is slidably mounted to the second arm member.

- U.S. Patent 5,759,165 (Col. 3, Lines 41-50; Fig. 1(14)(12)(16)(18))
- U.S. Patent 2,832,334 (Col. 2, Lines 14-26; Fig. 1(24); Fig. 3(24a))

IX. PRECISE REASONS FOR RELIEF

A. U.S. patent no. 5,759,165 (Exhibit 1008) Anticipates Claim 26 of the '179 Patent.

U.S. Patent No. 5,759,165 (Exhibit 1008) discloses "a range-of-motion orthosis for applying torque across a forearm of a patient." (Exhibit 1008, Abstract). The '165 patent was issued on June 2, 1998, more than one year before the earliest effective filing date of the '179 patent. However, Patentee for the '179 patent failed to provide this publically available reference to the USPTO. Thus, the '165 patent (Exhibit 1008) is previously undisclosed prior art to the '179 patent at least pursuant to 35 U.SC. § 102 (a) and (b). Moreover, Claim 26 of the '179 patent is invalid in view of U.S. Patent No. 5,759,165 (Exhibit 1008), which, as demonstrated below, anticipates every element of Claim 26 of the '179 patent.

Claim 26 of the '179 Patent recites "[a]n orthosis for stretching tissue around a joint of a patient between first and second relatively pivotable body portions."

Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit

1008) discloses this element of Claim 26 of the '179 patent in the Abstract. (Exhibit 1010, ¶ 20)

Claim 26 of the '179 patent recites "a first arm member affixable to the first body portion." Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008) discloses this element of Claim 26 of the '179 Patent at Col. 3, Lines 20-21 and in Fig. 3(20). (Exhibit 1010, ¶ 21)

Claim 26 of the '179 patent further recites an orthosis device "including a first extension member extending [from the first arm member]". Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008) discloses this element of Claim 26 of the '179 patent at Col. 3, Lines 20-21 and in Fig. 3(22). (Exhibit 1010, ¶ 22)

Claim 26 of the '179 patent further recites an orthosis device with "a second arm member affixable to the second body portion." Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008) discloses this element of Claim 26 of the '179 patent at Col. 4, Lines 26-27 and in Fig. 3(46)(48). (Exhibit 1010, ¶ 23)

Claim 26 of the '179 patent further recites an orthosis device ". . . including a second extension member having an arcuate shape extending therefrom." Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008)

discloses this element of Claim 26 of the '179 patent at Col. 4, Lines 52-57; Col. 5, Lines 1-10; and Figs. 5, 6, and 7(56). (Exhibit 1010, ¶ 24)

Claim 26 of the '179 patent further recites an orthosis device where "the second extension member is operatively connected to the first extension member and travels along an arcuate path through the first extension member when the second arm member is moved from a first position to a second position relative to the first arm member." Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008) discloses this element of Claim 26 of the '179 patent at Col.5, Lines 1-2 and in Fig. 5(c). (Exhibit 1010, ¶ 25)

Claim 26 of the '179 patent further recites an orthosis device having "a hand pad attached to the second arm member, wherein the hand pad is slidably mounted to the second arm member." Using Patentee's analysis of this Claim (Exhibit 1007), the '165 patent (Exhibit 1008) discloses this element of Claim 26 of the '179 patent at Col.3, Lines 41-50 and Fig. 1(14)(12)(16)(18). (Exhibit 1010, ¶ 26)

As shown in the attached Exhibit 1007, this anticipation analysis of claim 26 of the '179 patent is identical to the analysis proposed by Patentee to demonstrate that Petitioner's commercial product is covered by claim 26 of the '179 patent. (Exhibit 1010, ¶ 27) Based on the foregoing, a reasonable likelihood exists that Petitioner will prevail in its challenge of Claim 26 of the '179 patent. The USPTO

should, thus, initiate IPR proceedings and find the '179 patent invalid pursuant to 35 U.S.C. § 102(a) and/or (b).

B. U.S. Patent No. 2,832,334 (Exhibit 1009) Anticipates Claim 26 of the '179 Patent.

U.S. Patent No. 2,832,334 (Exhibit 1009) discloses a "[t]herapeutic device for use in manipulative treatment of joints of the human body." (Exhibit 1009, Title). The '334 patent issued on April 29, 1958, more than one year before the earliest effective filing date of the '179 patent. However, Patentee for the '179 patent failed to provide this publically available reference to the USPTO. Thus, the '334 patent (Exhibit 1009) is previously undisclosed prior art to the '179 patent at least pursuant to 35 U.SC. § 102 (a) and (b). Moreover, Claim 26 of the '179 patent is invalid in view of U.S. Patent No. 2,832,334 (Exhibit 1009), which, as demonstrated below, anticipates every element of Claim 26 of the '179 patent.

Claim 26 of the '179 patent recites "[a]n orthosis for stretching tissue around a joint of a patient between first and second relatively pivotable body portions." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent in the title. (Exhibit 1010, ¶ 29)

Claim 26 of the '179 patent further recites "a first arm member affixable to the first body portion." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Col.2, Lines 14-15 and Fig. 1(11). (Exhibit 1010, ¶ 30)

Claim 26 of the '179 patent further recites an orthosis device "including a first extension member extending [from the first arm member]." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Col. 3, Lines 36-37 and Fig. 1(28). (Exhibit 1010, ¶ 31)

Claim 26 of the '179 patent further recites an orthosis device with "a second arm member affixable to the second body portion." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Col. 2, Lines 14-15 and Fig. 1(10) and Fig. 2(10). (Exhibit 1010, ¶ 32)

Claim 26 of the '179 patent further recites an orthosis device "... including a second extension member having an arcuate shape extending therefrom." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Fig. 1(29), Fig. 2(29), Fig. 3(29), and Fig. 4(29). (Exhibit 1010, ¶ 33)

Claim 26 of the '179 patent further recites an orthosis device where "the second extension member is operatively connected to the first extension member and travels along an arcuate path through the first extension member when the second arm member is moved from a first position to a second position relative to the first arm member." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Col. 3, Lines 14-17 and Figs. 1, 2, and 3. (Exhibit 1010, ¶ 34)

Claim 26 of the '179 patent further recites an orthosis device having "a hand pad attached to the second arm member, wherein the hand pad is slidably mounted to the second arm member." Using Patentee's analysis of this Claim (Exhibit 1007), the '334 patent (Exhibit 1009) discloses this element of Claim 26 of the '179 patent at Col. 2, Lines 14-26 and Fig. 1(24) and Fig. 3(24a). (Exhibit 1010, ¶ 35)

As shown in the attached Exhibit 1007, this anticipation analysis of claim 26 of the '179 patent is identical to the analysis proposed by Patentee to demonstrate that Petitioner's commercial product is covered by claim 26 of the '179 patent. (Exhibit 1010, ¶ 36). Based on the foregoing, a reasonable likelihood exists that Petitioner will prevail in its challenge of Claim 26 of the '179 patent. The USPTO should, thus, initiate IPR proceedings and find Claim 26 of the '179 patent invalid pursuant to 35 U.S.C. § 102(a) and/or (b).

X. CONCLUSION

Because a reasonable likelihood exists that Petitioner will prevail in its challenge of at least one claim of the '179 patent in light of the above-referenced prior art, the USPTO should initiate IPR proceedings and find Claim 26 of the '179 patent invalid pursuant to 35 U.S.C. § 102(a) and/or (b).

CARSON BOXBERGER

s/Jacque R. Wilson Pag N

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CERTIFICATE OF SERVICE

I hereby certify that on this 2nd day of April, 2015 a true and complete copy of the above and foregoing was served via certified mail/return receipt requested:

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