Trials@uspto.gov 571.272.7822

# UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE PATENT TRIAL AND APPEAL BOARD

# GLOBUS MEDICAL, INC., Petitioner,

v.

MOSKOWITZ FAMILY LLC, Patent Owner.

> IPR2020-01307 Patent 8,353,913 B2

Before MEREDITH C. PETRAVICK, NEIL T. POWELL, and JAMES J. MAYBERRY, *Administrative Patent Judges*.

PETRAVICK, Administrative Patent Judge.

DECISION Denying Institution of *Inter Partes* Review 35 U.S.C. § 314(a)

### I. INTRODUCTION

Petitioner Globus Medical, Inc. filed a Petition (Paper 1, "Pet.") requesting *inter partes* review of claims 1, 5–8, 10, 11, 14, 15, 19–22, 24, 26–28, 30, 32, 34–36, 38, and 39 of U.S. Patent No. 8,353,913 B2 (Ex. 1001, "the '913 Patent"). Patent Owner Moskowitz Family LLC filed a Preliminary Response (Paper 6, "Prelim. Resp.").

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition and any response thereto shows "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." Taking into account the arguments presented in the parties' briefs, we conclude that the information presented in the Petition fails to establish that there is a reasonable likelihood that Petitioner would prevail in challenging at least one of claims 1, 5–8, 10, 11, 14, 15, 19–22, 24, 26–28, 30, 32, 34–36, 38, and 39 of U.S. Patent No. 8,353,913 B2 as unpatentable under the grounds presented in the Petition.

Pursuant to § 314, we decline to institute an *inter partes* review as to these claims of the '913 Patent.

#### A. Related Matters

The '913 Patent is the subject of *Moskowitz Family LLC v. Globus Medical Inc.*, Case No. 2:20-cv-03271 in the U.S. District Court for the Eastern District of Pennsylvania. Pet. 2–3; Paper 4, 2.

A number of Patent Owner's patents are also subject to *inter partes* review, as indicated in the table below.

Patent No.	IPR No(s).
9,889,022	IPR2020-01308
10,028,740	IPR2020-01309
10,251,643	IPR2020-01310
10,307,268	IPR2020-01303, IPR2020-01304
10,478,319	IPR2020-01305, IPR2020-01306

Pet. 3.

# B. The '913 Patent

The '913 Patent is titled "Bi-directional Fixating Transvertebral Body Screws and Posterior Cervical and Lumbar Interarticulating Joint Calibrated Stapling Devices for Spinal Fusion." Ex. 1001, code (54).

Figure 5C of the '913 Patent is reproduced below.

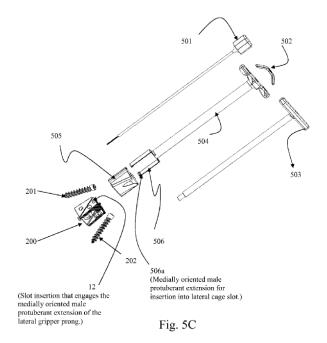


Figure 5C depicts an exploded view of gripper 504, screw guide 505, and box expander 200. Ex. 1001, 6:55–59. "The grip[p]er 504 has grip[p]er prongs 506 which insert into grooves of the screw guide 505. The grip[p]er prongs 506 include medially oriented male protuberant extensions 506*a* that engage the slot or indentations 12 of [] the screw box 200 (FIGS. 5A-D) thus perfectly aligning them." *Id.* at 8:65–9:3.

# C. Challenged Claims

Petitioner challenges claims 1, 5–8, 10, 11, 14, 15, 19–22, 24, 26–28, 30, 32, 34–36, 38, and 39. Of the challenged claims, claims 1, 15, 38, and 39 are independent. Claims 5–8, 10, 11, and 14 depend from claim 1. Claims 19–22, 24, 26–28, 30, 32, and 34–36 depend from claim 15.

Independent claims 1 and 15 recite a tool for inserting fusion spacer. Claim 1 is illustrative of these claims and reproduced below:

1. A tool for manipulating and inserting a universal, inter vertebral bone fusion spacer into a disc space between a first vertebral body and a second vertebral body for providing fusion of the first vertebral body to the second vertebral body via biological bone fusion and screw fusion, wherein the universal, intervertebral bone fusion spacer includes an inter vertebral cage having a first integral screw guide and a second integral screw guide, wherein each longitudinal end of the intervertebral cage includes a slot or indentation formed adjacent to an edge of an upper surface of the intervertebral cage,

the tool comprising:

a gripper having a plurality of prongs,

wherein a distal end of each of the plurality of prongs is capable of engaging a respective slot or indentation of the intervertebral cage; and

- a screw guide for controlling a direction of screws that are inserted into the first integral screw guide and the second integral screw guide,
- wherein the screw guide is positioned between the plurality of prongs.

Ex. 1001, 12:53–13:5.

Independent claims 38 and 39 recite a method of inserting a universal, intervertebral bone fusion spacer into a disc space. Claim 38 is illustrative of these claims and reproduced below:

38. A method of inserting a universal, intervertebral bone fusion spacer into a disc space between a first vertebral body and a second vertebral body using a tool for manipulating and inserting the universal, intervertebral bone fusion spacer into the disc space between the first vertebral body and the second vertebral body,

- wherein the universal, intervertebral bone fusion spacer includes:
  - an intervertebral cage having a first integral screw guide and a second integral screw guide, wherein a surface of each longitudinal end of the intervertebral cage includes a slot or indentation formed adjacent to an edge of an upper Surface of the intervertebral cage for receiving a distal end of a prong of tool; and

wherein the tool includes:

a gripper having a plurality of prongs,

- wherein a distal end of each of the plurality of prongs is capable of engaging a respective slot or indentation of the intervertebral cage, and
- a screw guide for controlling a direction of a first screw and a second screw that are inserted into the first integral screw guide and the second integral screw guide, wherein the screw guide is positioned between the plurality of prongs, and

the method comprising:

- measuring a dimension of the disc space between the first vertebral body and the second vertebral body;
- determining that the disc space is a lateral disc space, an anterior lateral disc space, a posterior lumbar disc space, an anterior lumbar disc space, or an anterior cervical disc space;
- selecting the universal, intervertebral bone fusion spacer based on the measured dimension of the disc space and based on the determination of the disc space being the lateral disc space, the anterior lateral disc space, the posterior lumbar disc space, the anterior lumbar disc space, or the anterior cervical disc space;
- selecting the screw guide based on the selected universal, intervertebral bone fusion spacer and positioning the screw guide between the plurality of prongs;
- positioning the intervertebral cage between the plurality of prongs Such that each slot or indentation of the intervertebral cage corresponds with the distal end of each of the plurality of prongs;
- inserting the selected universal, intervertebral bone fusion spacer into a midline of the disc space using the tool until the selected universal, intervertebral bone fusion spacer is flush or countersunk relative to the first vertebral body and the second vertebral body; and
- confirming a position and placement of the universal, intervertebral bone fusion spacer relative to the first vertebral body and the second vertebral body.

Ex. 1001, 16:47–17:31

# D. Alleged Grounds of Unpatentability

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 5, 7, 8, 10, 11, 14, 15, 19, 21, 22, 24, 26–28, 30, 32, 34–36, 38, 39	103(a)	Waugh <sup>1</sup> and Fanger <sup>2</sup>
6, 20	103(a)	Waugh, Fanger, and Neumann <sup>3</sup>

Petitioner asserts the following grounds of unpatentability:

Pet. 5. In addition to the references listed above, Petitioner relies on the Declaration of Jorge A. Ochoa, PH.D., P.E. (Ex. 1003).

# II. ANALYSIS

It is Petitioner's burden to prove unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). At this stage of the proceeding, Petitioner must establish a reasonable likelihood that it will prevail with respect to at least one of the challenged claims. 35 U.S.C. § 314(a). We analyze Petitioner's asserted grounds of unpatentability to determine whether Petitioner has met the threshold standard of 35 U.S.C. § 314(a). For the reasons explained in the analysis below, we determine that Petitioner fails to meet its burden.

<sup>&</sup>lt;sup>1</sup> U.S. Patent No. 8,425,607 B2, filed Apr. 3, 2007 (Ex. 1028) ("Waugh").

<sup>&</sup>lt;sup>2</sup> U.S. Patent Application Publication No. 2004/0204747, published Oct. 14, 2004 (Ex. 1029) ("Fanger").

<sup>&</sup>lt;sup>3</sup> U.S. Patent No. 6,752,832 B2, issued June 22, 2004 (Ex. 1030) ("Neumann").

# A. Claim Construction

"[I]n an *inter partes* review proceeding, a claim of a patent . . . shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100(b). In applying a district court-type claim construction, we are guided by the principle that the words of a claim "are generally given their ordinary and customary meaning," as understood by a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (citation omitted). "In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence." DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing Phillips, 415 F.3d at 1312–17). There is a "heavy presumption," however, that a claim term carries its ordinary and customary meaning. CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted).

"Petitioner submits that the claim terms require no express construction and that they should be given their ordinary and customary meaning" except for certain terms listed in a table, which is reproduced below. Pet. 11.

Claim Term	Petitioner's Proposed Construction
" intervertebral bone	"an intervertebral bone fusion spacer
fusion spacer"	designed to be inserted between two
	adjacent vertebrae"

Claim Term	Petitioner's Proposed Construction
"universal, intervertebral	"an intervertebral bone fusion spacer
bone fusion	designed to be inserted between two
spacer"	adjacent vertebrae in any region of the
	spine, i.e., cervical, thoracic, or lumbar,
	using any approach, e.g., posterior, anterior, or lateral"
"screw fusion"	"fusion between two adjacent
	intervertebral bodies based on the use of
	screws having a predetermined, fixed
	trajectory"
"integral screw guide"	"screw guide located on the spacer, as
	opposed to on the tool"
"screw guide"	"screw guide located on the tool, as
	opposed to on the spacer"
"gripper having a plurality	"a tool used to grasp the spacer and the
of prongs"	screw guide using the slots or
	indentations of the spacer and the
"with a main the a share litry of	grooves of the screw guide"
"wherein the plurality of	"wherein the prongs connect to and hold
prongs engage and hold the screw guide in place" <sup>4</sup>	in place the screw guides on the tool"
"integral trajectory guide"	"a portion of the screw guide located on
integral trajectory guide	the tool (as opposed to the spacer) that
	provides a predetermined angle of
	trajectory for a bone screw through the
	tool"
"wherein the screw guide	"wherein the prongs of the tool
is positioned	surround the screw guide on the tool"
between the plurality of	
prongs"	

Pet. 11–13.

<sup>&</sup>lt;sup>4</sup> The element "wherein the plurality of prongs engage and hold the screw guide in place" appears in claims 2 and 6, but not in any challenged claim. We, thus, do not consider Petitioner's proposed construction of this element.

If a petitioner believes that a claim term requires an express construction, the petitioner must include a statement identifying a proposed construction of the particular term and where the intrinsic and/or extrinsic evidence supports that meaning.

Consolidated Patent Trial Practice Guide,<sup>5</sup> 44 (Nov. 2019). Petitioner baldly asserts that these terms "should be construed in accordance with the intrinsic record." *Id.* Petitioner, however, provides no further explanation and citations to evidence to support its proposed constructions. *Id.* Petitioner, thus, does not persuade us to adopt its proposed constructions.

Patent Owner indicates that no claim construction is necessary to deny institution. Prelim. Resp. 5. We agree that we do not need to construe explicitly any claim terms in order to resolve the issue before us. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) ("[C]laim terms need only be construed 'to the extent necessary to resolve the controversy.") (quotation omitted).

## B. Principles of Law

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under § 103 that requires consideration of four factors: (1) the "level of ordinary skill in the pertinent art," (2) the "scope and content of the prior art," (3) the "differences between the prior art and the claims at issue," and (4) "secondary considerations" of non-obviousness such as "commercial success, long-felt but unsolved needs, failure of others, etc." *Id.* at 17–18. "While the sequence of these questions might be reordered in any particular

<sup>&</sup>lt;sup>5</sup> Available at https://www.uspto.gov/about-us/news-updates/consolidated-trial-practice-guide-november-2019.

case," *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007), the Federal Circuit has "repeatedly emphasized that an obviousness inquiry requires examination of all four *Graham* factors and that an obviousness determination can be made only after consideration of each factor." *Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1335 (Fed. Cir. 2016).

With respect to the fourth *Graham* factor, the record in this proceeding does not include any argument or evidence directed to secondary considerations of nonobviousness. The analysis below addresses the first three *Graham* factors.

## C. Level of Ordinary Skill in the Art

In determining the level of skill in the art, we consider the type of problems encountered in the art, the prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and the educational level of active workers in the field. *Custom Accessories, Inc. v. Jeffrey-Allan Indus. Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *Orthopedic Equip. Co. v. U.S.*, 702 F.2d 1005, 1011 (Fed. Cir. 1983).

Petitioner contends that a person having ordinary skill in the art ("PHOSITA") at the time of the invention of the '913 Patent would have had the following education and experience:

a Bachelor's or equivalent degree in Mechanical Engineering or a related discipline (e.g. biomechanics or biomedical engineering), and at least five years of experience. The experience would consist of a) designing, developing, evaluating and/or using prosthetic devices, b) anatomy, physiology and biology of soft and calcified tissues including bone healing and fusion, and c) biomechanical and functional loading of orthopedic implants. Alternatively, a [PHOSITA] could have an advanced degree, in the technical disciplines provided above, or a Doctor of Medicine, and at least two years of experience in the subject areas provided above

## Pet. 13 (citing Ex. 1003 ¶¶ 25–20).

Patent Owner does not dispute Petitioner's definition of the level of ordinary skill in the art. *See generally* Prelim. Resp.

For purposes of this Decision, we adopt Petitioner's proposal as reasonable and consistent with the prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art).

## D. Waugh and Fanger

## 1. Overview of Waugh

Waugh describes implanting device 100 between spinal vertebrae to maintain the vertebral spacing and provide vertebral support. *Id.* at 3:24–32. Waugh's Figure 3 is reproduced below.

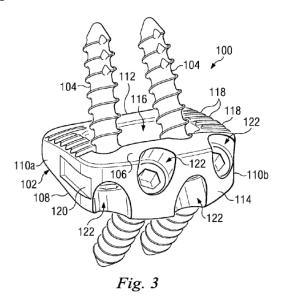


Figure 3 depicts one embodiment of implantable device 100. *Id.* at 2:31–32. Implantable device 100 includes implantable member 102, such as

a spacer, and anchor members 104. *Id.* at 3:36–38. With respect to an insertion implantable device 100 between vertebra, Waugh states:

The side surfaces 110a-b each include a recessed slot 120 configured to cooperate with an insertion tool (not shown) that selectively connects to the implant member 102. In some embodiments, within the slot 120, connecting impressions (not shown) may be configured to provide a secure connection with the insertion tool.

Id. at 3:59-64.

### 2. Overview of Fanger

Fanger discloses "a guide device for use with a spinal fixation element, such as a spinal fixation plate, that has at least one pair of thru bores formed therein." Ex. 1029 ¶ 7. Fanger's Figure 5A is reproduced below.

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Fig. 5A
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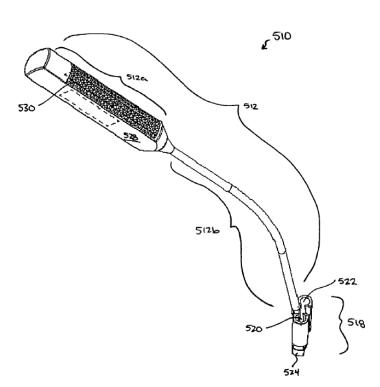
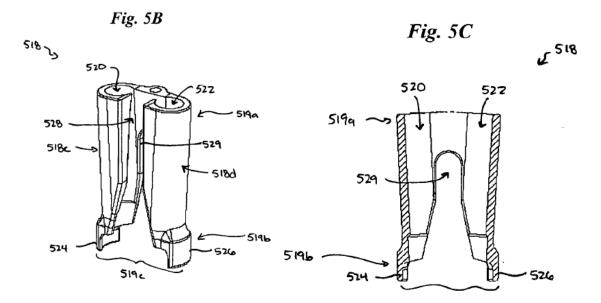


Figure 5A depicts an embodiment of guide device 510. *Id.* ¶ 46. Guide device 510 has an elongated shaft 512 and guide member 518. Fanger's Figures 5B and 5C is reproduced side-by-side below.



Figures 5B and 5C depicts guide member 518. *Id.* ¶¶ 19–20. Guide member 518 has first pathway 520 and second pathway 522 defined by sidewalls 518*c*, 518*d*, respectively. *Id.* ¶ 47. Guide member 518 also has tabs 524, 526, formed on sidewalls 518*c*, 1528*d* and engaging outer surfaces of a spinal fixation element. *Id.* ¶ 49.

3. Analysis

a) Independent Claims 1, 15, 38, and 39

Petitioner contends that a combination of Waugh's implantable device 100 and Fanger's guide device 510 discloses all of the elements of independent claims 1, 15, 38, and 39. Pet. 22–33. In particular, Petitioner relies upon Fanger as disclosing the claim element "wherein the screw guide is positioned between the plurality of prongs" (Ex. 1001, 13:4–5, 15:11–12,

17:2–3, 17:62–63). Pet. 29–30. With respect to positioning the screw guide between the prongs, the Petition contends:

Fanger teaches that the sidewalls 518c, 518d of the guide member 518 define pathways 520, 522 extending through the guide member 518 and configured to receive and guide fasteners, such as bone screws, toward the spinal fixation implant. EX 1029 at [0038], [0046]. Tabs 524, 526 extending laterally outwardly and distally from the side walls 51[8]c and 518d engage opposed outer surfaces or edges of the spinal fixation implant to retain the implant between the tabs 524, 526. *Id.* at [0049], FIGs. 3, 5B. Thus, the pathways 520, 522 are located between the distally-extending tabs 524, 526. *Id.* at FIGs. 5B, 5C.

Pet. 29. The Petition also reproduces Fanger's Figures 5B and 5C, which depicts guide member 518, and cites to paragraph 62 of the testimony of Dr. Jorge A. Ochoa. *Id.* at 30.

Patent Owner disputes that Fanger discloses positioning the screw guide between the prongs under the ordinary or customary meaning of the word "between." Prelim. Resp. 15–16. Patent Owner argues that Fanger discloses positioning a spinal fixation implant, not the screw guide of a tool, between tabs 524, 526. *Id.* at 16.

We agree with Patent Owner. Fanger's sidewalls 518c, 518d define first and second pathways 520, 522. Ex. 1029 ¶ 46 ("As shown, each pathway 520, 522 is defined by a substantially semi-cylinderical or C-shaped sidewall."), ¶ 47; Pet. 29 ("Fanger teaches that the sidewalls 518c, 518d of the guide member 519 define pathways 520, 522 extending through the guide member 518."). As can be seen from Fanger's figures, tabs 524, 526 extend distally and laterally from the ends of sidewalls 518c, 518d and, thus, sidewalls 518c, 518d do not extend between tabs 524, 526. Ex. 1029 ¶¶ 8, 47, Figs. 5A–5c. As sidewalls 518c, 518d define pathways 520, 522,

Petitioner cannot reasonably contend that pathways 520, 522 extend between tabs 524, 526.

Further, Fanger discloses seating a spinal fixation element between tabs 524, 526. *Id.* ¶ 49. Petitioner's declarant Dr. Ochoa testifies, "Fanger teaches that the tabs extend laterally (*i.e.*, outwardly) and distally — from the sidewalls of the guide member and engage opposed outer surfaces or edges of the spinal fixation element to retain the fixation element between the tabs." Ex. 1003 ¶ 62 (citing Ex. 1029 ¶ 49, Fig. 5B). Neither Fanger nor Dr. Ochoa's testimony supports Petitioner's contentions.

Petitioner, thus, does not persuade us that Fanger discloses, "wherein the screw guide is positioned between the plurality of prongs." Accordingly, we determine that Petitioner fails to establish a reasonable likelihood that independent claims 1, 15, 38, and 39 are unpatentable under 35 U.S.C. § 103 over Waugh and Fanger.

b) Dependent Claims 5, 7, 8, 10, 11, 14, 19, 21, 22, 24, 26–28, 30, 32, and 34–36

Claims 5, 7, 8, 10, 11, 14, 19, 21, 22, 24, 26–28, 30, 32, and 34–36 depend directly or indirectly from claims 1 or 15. Accordingly, we determine that Petitioner fails to establish a reasonable likelihood that claims 5, 7, 8, 10, 11, 14, 19, 21, 22, 24, 26–28, 30, 32, and 34–36 are unpatentable under 35 U.S.C. § 103 over Waugh and Fanger. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious.").

### E. Waugh, Fanger, and Neumann

Claims 6 and 20 depend from claims 1 and 15, respectively. Petitioner contends that "Waugh in view of Fanger as applied to claims 1 and 15, and further in view of Neumann, renders claims 6 and 20 unpatentable as obvious under 35 U.S.C. § 103." Pet. 55. Petitioner does not rely upon Neumann to cure the deficiencies of the combination of Waugh and Fanger. Accordingly, we determine that Petitioner fails to establish a reasonable likelihood that claims 6 and 20 are unpatentable under 35 U.S.C. § 103 over Waugh, Fanger, and Neumann.

## III. CONCLUSION

We conclude that the information presented in the Petition fails to establish that there is a reasonable likelihood that Petitioner would prevail in challenging at least one of claims 1, 5–8, 10, 11, 14, 15, 19–22, 24, 26–28, 30, 32, 34–36, 38, and 39 of the '913 Patent. Accordingly, we deny institution of *inter partes* review.

## IV. ORDER

In consideration of the foregoing, it is hereby: ORDERED that the Petition is denied.

### **PETITIONER:**

George Moustakas David Utykanski HARNESS, DICKEY, & PIERCE, PLC gdmoustakas@hdp.com davidu@hdp.com

### PATENT OWNER:

Timothy W. Riffee Joseph V. Colaianni Indranil Mukerji Brian J. Livedalen Craig A. Deutsch Jack R. Wilson FISH & RICHARDSON P.C. IPR43982-0007IOP1@fr.com PTABInbound@fr.com