IN THE UNITED STATES DISTRICT COURT WESTERN DISTRICT MISSOURI CENTRAL DIVISION

ROGER P. JACKSON, MD,)	
Plaintiff,)	
vs. MIZUHO ORTHOPEDIC SYSTEMS, INC.,)	Case No. 4:12-cv-01031-NKL
Defendant.)	

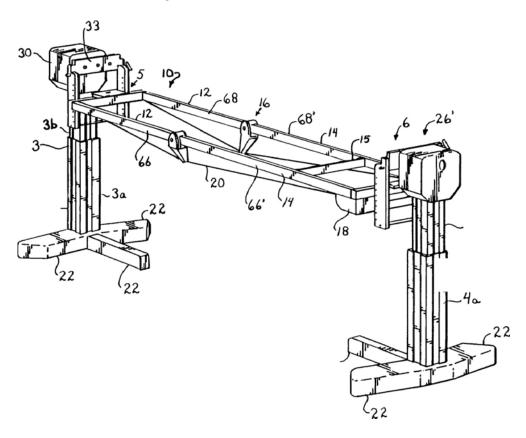
ORDER

The current dispute between Plaintiff Roger P. Jackson (Dr. Jackson) and Defendant Mizuho Orthopedic Systems, Inc. (Mizuho) involves two patents related to spinal surgery tables, referred to as "Patient Positioning Support Structure[s]." The two patents, United States Patent Nos. 7,565,708 ("the '708 Patent") and 8,060,960 ("the '960 Patent") will be addressed collectively as the "Patents-in-Suit". The purpose of this Order is to construe the disputed terms in the Patents-in-Suit.

I. Background

Plaintiff Dr. Jackson is a spinal surgeon with an active practice in the Kansas City area. Dr. Jackson is the owner and inventor of the Patents-in-Suit. Defendant Mizuho is a Delaware corporation that is engaged in the manufacture and sale of medical equipment. Dr. Jackson filed this lawsuit, alleging that Mizuho infringes the Patents-in-Suit by its manufacture and sale of its Axis Table (f/k/a the Axis-Jackson Table) and the Pro-Axis Table.

The Patents-in-Suit disclose tables that allow spinal surgeons to place their patients in different positions to facilitate better access during surgery and intraoperative examination of the patient. The surgical tables claimed in the Patents-in-Suit are adjustable in multiple directions. The tables provide surgeons with a stable platform that can angulate, articulate, pivot, and rotate, and that can provide elevation of the patient during surgery, including examination by imaging of the patient. One of the primary benefits of the invention is that the end supports remain stationary while the patient is repositioned. This ensures that the end supports do not roll over tubes or other medical equipment present during the surgery or interfere with the movements of surgical staff. Below is an illustrative drawing.



While the Patents-in-Suit have a combined 70 claims, the parties only dispute the following terms:

- 1) "translation connector" and "translation connector . . . so as to allow . . ." '708

 Patent, claims 1 and 13; '960 Patent, claims 1 and 48;
- 2) "in cantilevered relationship with" '708 Patent, claim 3; '960 Patent, claim 2;
- 3) "imaging table" '708 Patent, claim 10; '960 Patent, claim 7;
- 4) "pull-rod" '708 Patent, claims 5 and 6; '960 Patent, claims 3 and 4;
- 5) "detachable and placable" and "placable at either end in a plurality of locations" '708 Patent, claim 11; '960 Patent, claim 8;
- 6) "selectively telescopable" and "selectively telescoping support subassembly" '708 Patent, claim 8; '960 Patent, claim 1.

The Court adopts the parties' definitions for those terms where there is agreement. *See* Third Amended Claim Construction Chart and Prehearing Statement, [Doc. 77, at p. 3-4]. As for the above disputed terms, the Court makes the following findings after having considered the parties' respective positions during the *Markman* hearing.

II. Legal Standards Related to Claim Construction

Claim construction is a question of law for the Court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). In construing claims, the Court begins with the words of the claims to define the

¹ Dr. Jackson only wishes to construe "translation connector," while Mizuho wishes to construe "translation connector... so as to allow...."

² Dr. Jackson believes that "detachable and placable" requires construction, while Mizuho believes "placable at either end in a plurality of locations" is the correct term to construe.

³ The Court will consider the construction of these two related terms together.

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, 1313 (Fed. Cir. 2005) (*en banc*). "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *Id.* at 1313. In some instances, the ordinary meaning of claim language may be "readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id. at* 1314.

In addition, the specification section of a patent is "always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315. However, "a court may not read a limitation into a claim from the specification." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1117 (Fed. Cir. 2004). For example, "although the specification often describes very specific embodiments of the invention, [the Federal Circuit has] repeatedly warned against confining the claims to those embodiments." *Phillips*, 415 F.3d at 1323. This is because "persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments." Id. As a result, it is not proper to limit what is claimed to preferred embodiments or specific examples in the specification if the patentee did not demonstrate a clear intent to deviate from the claim terms' ordinary meaning in that way, or to otherwise disavow the claim scope. Teleflex Inc. v. Ficosa N. Am., Corp., 299 F.3d 1313, 1326-28 (Fed. Cir. 2002). Moreover, although an applicant may act as a

lexicographer in the specification, "the specification cannot support a definition that is contrary to the ordinary meaning of a claim term unless it communicates a deliberate and clear preference for this alternative definition." *Kumar v. Ovonic Battery Co., Inc.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003).

The prosecution history of a patent is another important source of intrinsic evidence. *Phillips*, 415 F.3d at 1315-16. The prosecution history consists of "the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Id.* Arguments and amendments made during prosecution may shed light on the meaning of the claim language by demonstrating how the inventor understood the invention. *Id.*, *citing Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). The prosecution history is useful to determine whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be. *Id.*

Courts may also consider extrinsic evidence in construing claims, but it is viewed as less reliable than intrinsic evidence. Extrinsic evidence is "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. "[W]hile extrinsic evidence 'can shed useful light on the relevant art,' . . . it is less significant than the intrinsic record in determining 'the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317. Extrinsic evidence may be used by the court to come to the proper understanding of the claims, but "it may not be used to vary or contradict the claim language." *Vitronics Corp.* 90 F.3d at 158.

The Court now turns to the specific claim terms which are in dispute.

III. Disputed Claim Terms

A. "Translation Connector" and "Translation Connector Subassembly"

Both parties agree that the term "translation connector" must be construed and both agree that the function of the translation connector is to allow the claimed tables to flex up and down without the end supports moving in relation to each other. The parties differ, however, in how the term "translation connector" should be construed. Dr. Jackson proposes that the term be construed as a "structure positionable at varying heights," while Mizuho contends that the term should be construed as a "passive translation element." Similarly, Dr. Jackson asserts that the term "translation connector subassembly" should be construed as "one or more structure(s) positionable at varying heights," while Mizuho contends that the term should be construed as a "passive translation element subassembly." The terms appear in several claims in the Patents-in-Suit. In particular, the term "translation connector" appears in asserted claims 1 and 13 of the '708 Patent and in asserted claim 48 of the '960 Patent. "Translation connector subassembly" appears in asserted claim 1 of the '960 Patent. An illustrative example of the use of the term "translation connector" is:

> [A] translation connector joining at least one of the ends of the patient support structure to a respective end support so as to allow the patient support structure to move through the various angular orientations thereof without the end supports moving relative to each other

'708 Patent, claim 1.

1. The Claim Language Supports Mizuho's Construction

Considering the term "translation connector" in conjunction with the term "so as to allow," ⁴ the Court concludes that a "translation connector" describes a passive element. The term "so as to allow" suggests that something other than the "translation connector" is generating the energy to move the patient support structure. In other words, the translation connector does not cause the patient structure to move but rather provides some "give" so that the patient support structure can move without the two end supports moving relative to each other. In addition, claim 13 of the '708 Patent and claim 48 of the '960 Patent also contain the phrase "to be moved," which also suggests passivity, and no language in any claim where "translation connector" appears describes this element in an active way, which the patentee clearly understood how to do. Finally, this interpretation gives meaning to all language in the claim. See Merck & Co., Inc. v. Teva Pharm. USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."); see also Elekta Instrument S.A. v. O.U.R. Sci. Int'l, Inc., 214 F.3d 1302, 1307 (Fed. Cir. 2000) (construing claim to avoid rendering the 30 degree claim limitation superfluous); Gen. Am. Transp. Corp. v. Cryo-Trans, Inc., 93 F.3d 766, 770 (Fed. Cir. 1996) (rejecting the district court's claim construction because it rendered superfluous the claim requirement for openings adjacent to the end walls).⁵

2. The Specifications Support a Finding that the Translation Connector is Passive

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⁴ The words "so as to allow" appear in each variation of the translator connector.

⁵ For example, claim 1 of the '708 patent contains an element called a "connecting structure," which "mov[es] and lock[s] the head and foot end portions [of the patient support structure]." If the translation connector actively moved the patient support structure, the connecting structure could be rendered superfluous.

The specifications also suggest that the translation connector is passive because all the translation connectors disclosed by the specification are passive; none are active. Indeed, the specifications make clear that it is not the translation connector, but rather cables in one embodiment (the "cable embodiment") and the pull-rod in the other embodiment (the "pull-rod embodiment"), that cause the motion of the patient support structure. For instance, in the "cable" embodiment, the specification describes a "cable drive system" whereby a "rotary motor . . . cooperat[es] with and driv[es] by rotation a pair of winch cylinders" with a pair of cables attached to the winch cylinders. Specification at 10:33-40. According to the specification, the motor winds and unwinds the cables in order to "break" (i.e., flex) the table. Specification at 10:46-59; see also 11:36-43 ("cables being shortened by rotation of the winch motor to result in an upward break or joint in the hinge assembly"). Similarly, in the pull-rod embodiment, the specification describes an "extendible and retractable" pull-rod, "controlling the hinge or break angle of the patient support " Specification at 15:19-24; see also 15:67-16:7; 16:50-64.

Dr. Jackson argues that the specification does disclose active elements for the translation connector because the "translation connector" can include a pull-rod, which is active. However, Dr. Jackson cites not to the specification, but rather to claim 3 of the '960 Patent for this proposition, which states "the apparatus of claim 1 wherein the translation connector *subassembly* comprises a pull-rod." But the "translation connector" and the "translation connector subassembly" are not the same thing. The patentee made a

deliberate decision to add the word "subassembly" to certain claims. If the translation connector subassembly was the same as the translation connector itself, the word "subassembly" would be superfluous. Such an interpretation would be improper. *See Merck & Co., Inc.*, 395 F.3d at 1372; *see also Elekta Instrument S.A.*, 214 F.3d at 1307; *Gen. Am. Transp. Corp.*; 93 F.3d at 770. Here, the "translation connector subassembly" comprises both the passive translation connector and the active pull-rod, but the translation connector itself is passive. Finally, there is no claim in either Patent-in-Suit wherein the translation connector itself (as opposed to the translation connector subassembly) is claimed to be a pull-rod or any other active element. While the specifications cannot limit a claim merely because all embodiments covered by the claim are not included, the examples contained in the specifications are an additional way to test the meaning of the language in the claim.

3. Dr. Jackson's Construction is Unsupported

The Court further holds that Dr. Jackson's proposed construction of "translation connector" is unsupported and so generic as to be unhelpful. Dr. Jackson does not cite to the claim language to support his proposed construction, but rather points to a single section of the specification which reads:

[t]he pivot pin 46 is receivable in each cooperating pair of apertures 44 allowing for selective placement of a translation connector 48 that is sized and shaped to be received between the pair of posts 40 and also receive the pivot pin 46 therethrough. The pin 46 and connector 48 are thus **positionable in an orientation transverse to the longitudinal extension of the support 10 at a variety of heights** to be selected by the surgeon and readily changeable, even during surgery if necessary, to vary the height of the frame section.

Specification at 8:4-11⁶ (emphasis added). This excerpt, however, simply explains that in this embodiment, one characteristic of the translation connector is that it is capable of being positioned at varying heights. This is far different from the patentee acting as his own lexicographer and defining "translation connector" as a "structure positionable at varying heights." To illustrate, the specification also references and discloses a number of other characteristics of translation connectors: 1) passivity, 2) ability to be sized and shaped to be received between a pair of posts, 3) having a slot for receiving a pivot pin, and 4) able to be pivoted with respect to the frame. Specification at 8:4-16; 16:62-67; 17:3-5; Figs. 4, 5, 45, 46. However, Dr. Jackson declined to include any of these characteristics in its proposed construction. More importantly, nothing in the claim language itself supports Dr. Jackson's proposed construction and Dr. Jackson's proposed construction is so generic as to be unhelpful to any jury. Markman, 52 F.3d at 979 ("[I]n a case tried to a jury, the court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim.").

Lastly, the "translation connector" terms should retain the concept of "translation." This concept is completely absent from Dr. Jackson's proposed construction, whereas Mizuho's proposal includes the term "translation." Dr. Jackson provides no explanation how this concept of translation is included in Dr. Jackson's proposed interpretation.

In sum, the Court construes the translation connector terms as follows:

<u>'708 Patent, claim 1</u>: "a passive translation element joining at least one of the ends of the patient support structure to a respective end support to permit the patient support

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⁶ For all purposes germane to this order, the specifications of the '708 and '960 Patents are identical, and will simply be referred to as the "specification[s]."

structure to move through the various angular orientations thereof without the end supports moving relative to each other"

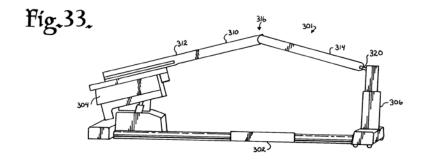
<u>'708 Patent, claim 13</u>: "a passive translation element joining at least one end of the patient support structure to a respective end support to permit the patient support structure to be moved through any of the plurality of the angles with respect to one another without the end supports moving relative to each other"

<u>'960 Patent, claim 1</u>: "a passive translation element of a subassembly cooperating with the articulation and pivotably connected head and foot end portions to permit the patient support subassembly to move through the various angular orientations thereof without the end supports moving relative to each other"

<u>'960 Patent, claim 48</u>: "a passive translation element joining at least one end of the patient support structure to a respective end support to permit the patient support structure to be moved through any of the plurality of the angles with respect to one another without the end supports moving relative to each other"

B. "In Cantilevered Relationship With"

The next term that requires construction is "in cantilevered relationship with." This term appears in claim 3 of the '708 Patent and claim 2 of the '960 Patent. An illustrative example of this term in the context of the claims is: "The apparatus of claim 1 wherein one of the first and second end supports is in cantilevered relationship with one of the head and foot end portions." '708 Patent, claim 3. Below is an illustrative drawing.



Dr. Jackson believes the term "cantilevered in relation to" should be construed as "fixed to and extends from," while Mizuho believes this term should be construed as "fixed and supported at only one end." In essence, this dispute boils down to whether the term requires fixing and support at only one end, or whether fixing and support at both ends is allowable.

The Court starts with the plain meaning of the term – "in cantilevered relationship with." *Interactive Gift Express* 256 F.3d at 1331. The concept of a "cantilevered" structure being fixed and supported at only one end has been in existence for quite some time. Mizuho submitted two separate dictionary definitions of the word "cantilevered." One definition defines "cantilevered" as "supported at only one end," and the other defined it as "fixed at only one end." [Doc. 56-9 and 56-10]. *See Markman*, 52 F.3d at 980 (extrinsic evidence "may be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history."). This plain meaning is further supported by the traditional use of this word to describe structures such as diving boards, which are clearly fixed to and supported at only one end. Further, there is no evidence that the patentee acted as his own lexicographer. In fact, the contrary is true; the specification supports a meaning of "fixed and supported at only one end."

In the specifications, the Patents-in-Suit disclose a single "cantilevered" embodiment. In this embodiment, one end of the patient support structure (element 312) is described as "cantilevered," while the other end (element 314) is not. Specification at 13:3-5. Element 312 is fixed to and supported at a large base (element 304), while

element 314 is attached by two hinges, elements 316 and 320. Specification at 13:7-12. While it is true that element 312 is connected to element 314 via the hinge, element 312 is only fixed and supported at the base 304. As the patentee noted in his description of the prior art, the oversized base is necessary to support the cantilevered section because it is the only structure providing any support to that section: "Such [cantilevered] designs typically employ either a massive base to counterbalance the extended support member or a large overhead frame structure to provide support from above." Specification at 2:63-65. Further, Dr. Jackson has not shown how the 316 hinge could support the weight of element 312. Absent such evidence, the Court sees no basis for construing "in cantilevered relation with" as "fixed to and extends from" merely because of this disclosure in the specifications.

Further, Dr. Jackson's proposed construction of "fixed to and extends from," fails to address the plain meaning of the term "cantilevered." Dr. Jackson does not cite to the claim language or argue that the plain meaning of this term supports his proposed construction. Rather, as the sole support for his proposed construction, Dr. Jackson points to a line in the specification that explains that element 312 is "fixed to and extends from" the end support. Specification at 13:6. But describing a characteristic is not the same as defining a term. If the specification described element 312 as "blue," that would not make the definition of "in cantilevered relationship with" "blue."

More importantly, Dr. Jackson's proposed construction would embrace even structures that are not cantilevered, thereby rendering the term meaningless. In other words, any table top is "fixed to and extends from" the table's base, not just a

cantilevered one. Dr. Jackson's proposed construction is therefore too broad to fit the actual language selected by the patentee. Therefore, the Court construes the term "in cantilevered relationship with" as follows:

<u>'708 Patent, claim 3</u>: "The apparatus of claim 1 wherein one of the first and second end supports is fixed to and supports only one end of the head and foot end portions."

<u>'960 Patent, claim 2</u>: "The apparatus of claim 1 wherein one of the first and second upright end supports is fixed to and supports only one end of the head and foot end portions."

C. "Pull-Rod"

The Patents-in-Suit disclose patient positioning tables with pull-rods. Using claim 5 and 6 of the '708 Patent as an example, the claim language reads:

- 5. The apparatus of claim 1 wherein connective structure comprises a pull-rod.
- 6. The apparatus of claim 5 wherein the pull-rod is attached to the foot end portion.

Dr. Jackson contends that the term "pull-rod" means a "rod that imparts a force on another element." Mizuho's proposed construction is "a rod that moves along its longitudinal axis." During the claim construction hearing, the parties agreed that the pull-rod does impart a force. Their dispute is whether the pull-rod is limited to a rod that must move along its longitudinal axis, as Mizuho contends. [C.C. Trans., Doc. 79, at p. 108, lines 10-17]. Based on the record, the Court adopts Dr. Jackson's proposed construction. The additional limitation that the rod must move along its longitudinal axis is neither present in the claim language nor required by the intrinsic evidence of record.

First, nothing in the claim language limits the pull-rod to movement along its longitudinal axis. The Patents-in-Suit do not require a direction of movement or force, and usage of the word "pull" does not mean the rod itself must move along its longitudinal axis. In fact, the parties agreed that, ordinarily, the word "pull" could describe movement in other directions than longitudinally, and the reference in the specification to the rod being "rotatable, extendible, [and] retractable . . .," does not persuade the Court otherwise. Neither "pull" nor these additional terms require or even suggest that the movement must be along a longitudinal axis. Indeed, given the many different references to the movement of the pull rod, one would expect the patentee to include the unexpected limitation of "moving along its longitudinal axis" if this were intended.

Further, as Dr. Jackson noted, the specification provides: "[i]t is foreseen that other embodiments according to the invention may utilize other types of push/pull rods or mechanisms, including, for example hydraulic systems." *See* Patents-in-Suit, Col. 16:7-10. This language precludes construing the claim by limiting the pull-rod to a rod that must move along its longitudinal axis. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1345-48 (Fed. Cir. 2001) (finding no indication that patentee intended to limit the claims to the illustrated embodiment because he stated, "[t]he invention is capable of other embodiments and of being practiced or being carried out in various ways."). Thus, the Court adopts Dr. Jackson's proposed construction that pull-rod means "a rod that imparts a force on another element."

D. "Selectively Telescopable" and "Selectively Telescoping Support Subassembly"

These terms appear in claim 8 of the '708 Patent and claim 1 of the '960 Patent.

Claim 8 of the '708 Patent claims "selectively telescopable" end supports, while claim 8 of the '960 Patent claims a "selectively telescoping support subassembly including first and second spaced opposed upright end supports." Dr. Jackson believes these term should be construed as "selectively increasable and decreaseable to permit adjustment" ('708 Patent) and "one or more structure(s) that independently permit selectively increasable and decreasable adjustment" ('960 Patent). Mizuho believes these terms should be construed as "includes a first segment that fits into a second segment" ('708 Patent) and "a support subassembly that includes a first segment that fits into a second segment" ('960 Patent). The Court adopts Mizuho's proposed construction.

The Court's analysis starts with the plain meaning of "telescopable" and "telescoping," which is commonly understood. *See Phillips*, 415 F.3d at 1314. The word "telescoping" evokes images of telescoping car antennae, telescoping steering wheels, and the classic telescope. All of these items lengthen and shorten in a very particular way: by fitting one segment into another. Mizuho's proposed constructions are true to this plain meaning, and there is no indication that the patentee intended to deviate from this commonly understood definition.

Mizuho's proposed constructions are also supported by the specification. Every time the specification discusses "telescoping" movement, it is describing movement whereby one segment fits into a second segment. *See* specification at 7:23-28 (describing

the "telescoping lift arm segments" of Figure 1); 11:13-17 (describing the "telescoped" column of Figure 15); 13:19-21 (describing the "telescoping base" of Figure 33). Indeed, nowhere in the specification is this term used to describe movement that does not include a first segment fitting into a second segment.

Dr. Jackson's proposed constructions do not persuade the Court. First and foremost, they are vague. Dr. Jackson's proposed constructions encompass literally anything that increases or decreases in any way. Dr. Jackson's proposed constructions therefore fail to describe the metes and bounds of these claims, rendering them indefinite. *See Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) ("Because claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform the public of the bounds of the protected invention, i.e., what subject matter is covered by the exclusive rights of the patent."). Dr. Jackson's proposed constructions are also so broad that they encompass anything that is "increasable and decreasable" in any way, including in ways that are inconsistent with the plain meaning of "telescopable" discussed above.

In an apparent attempt to solve these problems, Dr. Jackson argues that it is "clear" that what increases and decreases is height or length. [Doc. 62, at p. 15-16]. But this is not "clear" to the Court and would not be "clear" to a jury absent explanation. This underscores the fact that Dr. Jackson's proposed constructions are indefinite. *Halliburton Energy Servs.*, 514 F.3d at 1249. Second, even under this hypothetical narrowed construction, the language is still too broad, encompassing many types of motions that are not "telescoping" in the traditional sense and thus ignoring the plain

meaning of the very particular word the patentee chose for these claims.

In sum, the Court construes the claims containing these terms as follows:

<u>'708 Patent, claim 8</u>: "The apparatus of claim 1 wherein at least one of the end supports includes a first segment that fits into a second segment."

<u>'960 Patent, claim 1</u>: "a support subassembly that includes a first segment that fits into a second segment including first and second spaced opposed upright end supports;"

E. "Imaging Table"

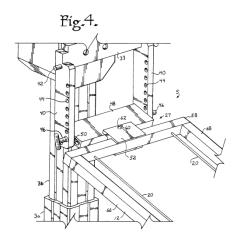
The next disputed term is "imaging table." Dr. Jackson proposes that "imaging table" means "a support surface compatible with imaging technologies." Mizuho proposes that "imaging table" means "a support surface that opposes the patient support structure in a spaced relationship and compatible with imaging technologies." The term appears in claim 10 of the '708 Patent and claim 7 of the '960 Patent. At the claim construction hearing, the parties agreed that the issue involving this term was whether the second imaging support surface was required to be a surface that opposes the patient support structure. [C.C. Trans., Doc. 79, at p. 83, lines 15-23, and p. 86, lines 5-12.].

Starting with the claim language, there is no indication that the imaging table must be a second surface opposing the patient support structure. The language of the claim reads: "The apparatus of claim 1 wherein the elongate patient support structure is a frame and further comprising a second patient structure, the second structure being an imaging table." *See* '708 Patent, claim 10 and '960 Patent, claim 7. Here, the claim language covers a frame and a second patient structure. The second support structure is an imaging table. Nothing in the claim language requires that the imaging table oppose the support structure.

Moreover, the specification discloses two embodiments of the patient support structure with an imaging table. One embodiment shows the patient support frame and the imaging table in a spaced orientation opposing one another. But the specification also explains: "[w]ith reference to FIGS. 15-17, the imaging sections 100 and 100' are illustrated, replacing the frame sections 12 and 14 of the embodiment disclosed in FIGS. 1-11." See Patents-in-Suit, Col. 11:7-10. Thus, the specification describes an embodiment with an imaging table that is not opposing the first patient support, but rather replacing the first patient support. Dr. Jackson's proposed construction encompasses all of the embodiments but Mizuho's proposed construction would exclude this latter embodiment. Further, this is not a case where the language of the claim suggests, even ambiguously, the limitation proposed by Mizuho. See SynQor, Inc. v. Artesyn Techs., Inc., 709 F.3d 1365, 1378 (Fed. Cir. 2013) ("A claim construction that excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support."). Thus, the Court adopts Dr. Jackson's construction of the term "imaging table."

F. "Detachable and Plac[e]able"

This dispute relates to the way in which the patient structure can be moved up and down on the end supports. The relevant claims cover: "[t]he apparatus of claim 1 wherein the patient support structure is detachable and placable at either end in a plurality of locations vertically spaced from the floor." *See* '708 Patent, claim 11 and '960 Patent, claim 8. Below is an illustrative drawing from the specification.



Dr. Jackson believes no construction of these terms are necessary, but if it is, "detachable and placeable" means "removable and adjustable." Mizuho believes the phrase "placable at either end in a plurality of locations" requires construction and means "capable of being attached to any one plural predefined fixed positions." Beginning with the claim language, the Court finds that some of these terms do not require a complicated or technical explanation. A jury will be able to understand their meaning without substantial guidance from the Court. Only the terms "plurality of locations" and "placable" might be confusing to a potential jury. Dr. Jackson's counsel acknowledged that "placable" is merely a misspelling of "placeable." Therefore, the Court finds that defining placable as placeable is sufficient to clarify that mistake. Thus the only real question is whether "placeable at either end in a plurality of locations" means there must be predefined attachment points on the vertical end supports to secure the patient support structure at different heights or does the invention also cover end supports without predetermined anchor points that would permit the patient support structure to be moved

up and down on the end supports and secured at indefinite points based on pressure points for example.⁷

Dr. Jackson's counsel contends it would be improper for the Court to incorporate the concept of "predefined fixed positions" into the construction because there is no language in the claim that indicates there must be predefined anchor points. It merely says the patient support structure must be placeable, which can be done either at predefined anchor points or at indeterminate points along the end supports which would permit maximum adjustability. In addition, he argues the specifications indicate that the patient support surface must be adjustable, and this supports Dr. Jackson's construction that placeable means adjustable.

Mizuho argues that the claim language supports its proposed construction, and that the specifications contain dozens of figures disclosing tables with the patient support structure being attached in predefined fixed positions. The above drawing is one such example. In contrast, Dr. Jackson has not identified an example in the specifications where the invention does not have fixed attachment points.

Reading the claims in light of the specification, the Court finds that the disputed phrase "plac[e]able at either end in a plurality of locations" means "capable of being attached at either end at predetermined fixed points in more than one location." First, the claim language supports this interpretation. In combination, the terms "placeable," "location," and particularly, "spaced," suggest fixed attachment points not indeterminate

⁷The parties agreed that "plurality of locations" means "more than one location" that must be vertically spaced from the floor, and the Court sees no reason to disagree with this construction. [C.C. Trans., Doc. 79, at p. 94, lines 3-13 and p. 96, lines 1-9].

attachment points. Second, the only drawings identified by the parties show fixed locations for the attachment of the table to the end supports. While the Court recognizes that "patent coverage is not necessarily limited to inventions that look like the ones in the figures," *Arlington Industr, Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246 (Fed. Cir. 2011), the absence of any other example and the suggestive language in the claim leads the Court to conclude that the inventor was not claiming every way in which the patient support could be attached to the end supports to permit height adjustments.

Furthermore, the fact that the patient support structure can be moved up and down by telescoping the end support is not relevant to the question of how the patient support structure must be attached to the end supports. In other words, there are two ways for the patient support structure to be made higher or lower. One is by telescoping and extending the end supports and one is by changing the place where the patient support structure is attached to the end supports. The fact that the patent claims both functions and they are separate functions, suggests that "placeable" cannot merely mean "adjustable," because then the same language would apply to qualitatively different functions. Further, Dr. Jackson has not shown how the patient support structure could be attached to the end supports by a method other than predetermined fixed locations. Nor is a tested, mechanical method intuitively evident. In the absent of some description in the specifications of a mechanisms that would permit such indefinite adjustments, it cannot be said the invention now claimed by Dr. Jackson was ever disclosed. This also supports the Court's construction.

G. Agreed Constructions

Pursuant to the parties' agreed constructions as set forth in the Third Amended Joint Claim Construction Statement, [Doc. 77], the Court hereby orders the following additional constructions:

- 1. "extending between" means "positioned between" in '708 Patent, claim 1 and '960 Patent, claims 1 and 49;
 - 2. "suspended between" means "supported between" in '708 Patent, claim 2;
- 3. "connecting structure" means "structure joining portion(s) of patient support structure" in '708 Patent, claims 1 and 18;
- 4. "rotation mechanism" means "mechanism for rotating the patient support structure" in '708 Patent, claim 9 and '960 Patent, claim 6;
- 5. "bridging substantially between" means "positioned substantially between" in '708 Patent, claim 13 and '960 Patent, claims 48 and 49;
- 6. "a powered actuator" means "a powered mechanism for moving or controlling a structure" in '960 Patent, claim 1;
- 7. "articulation" means "hinge mechanism or break" in '960 Patent, claims 1 and 47;
- 8. "slidably attached" means "connected to permit sliding movement" in '708 Patent, claim 7 and '960 Patent, claim 5;
- 9. "end support translation compensation mechanism" means "structure joining an end of the patient support to a respective end support to allow the patient support to move without moving the end supports relative to each other" in '960 Patent, claim 49;
 - 10. "lateral shifting mechanism" means "mechanism for shifting the patient

support structure laterally" in '708 Patent, claim 18;

11. "the angulation subassembly" means "one or more structure(s) to enable

selective hinging, articulation, or breaking of the patient support subassembly at desired

levels and increments as well as selective tilting of the support portions with respect to a

longitudinal axis of such support portions" in '960 Patent, claim 9;

12. "infinite adjustment" means "non-incremental adjustment" in '960 Patent,

claim 49;

13. "the rotation and angulation subassemblies" means "subassemblies to enable

coordinated rotation of the patient support subassembly about a longitudinal axis of the

patient support subassembly and to enable selective hinging, articulation, or breaking of

the patient support subassembly at desired levels and increments as well as selective

tilting of the patient support subassembly portions with respect to the longitudinal axis of

such patient support subassembly portions" in '960 Patent, claim 10;

14. "slider bar" means "bar to support and enable sliding movement" in '708

Patent, claim 7 and '960 Patent, claims 5 and 48; and

15. "slider bar holder structure" means "structure to slidably receive a bar to

support and enable sliding movement" in '960 Patent, claim 48.

IT IS SO ORDERED.

s/ Nanette K. Laughrey United States District Judge

Dated: <u>April 4, 2014</u> Jefferson City, Missouri

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