United States Court of Appeals for the Federal Circuit

05-1314

APPLIED MEDICAL RESOURCES CORPORATION,

Plaintiff-Appellant,

v.

UNITED STATES SURGICAL CORPORATION,

Defendant-Appellee.

Joseph R. Re, Knobbe, Martens, Olson & Bear, LLP, of Irvine, California, argued for plaintiff-appellant. With him on the brief were Joseph J. Jennings, Joseph S. Cianfrani, and Mark A. Geier.

Fred H. Bartlit, Jr., Bartlit Beck Herman Palenchar & Scott LLP, of Denver, Colorado argued for defendant-appellee. With him on the brief was Glen E. Summers. Of counsel on the brief was Donald L. Morrow, Paul Hastings Janofsky & Walker LLP, of Costa Mesa, California.

Appealed from: United States District Court for the Central District of California

Judge Cormac J. Carney

United States Court of Appeals for the Federal Circuit

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APPLIED MEDICAL RESOURCES CORPORATION,

Plaintiff-Appellant,

v.

UNITED STATES SURGICAL CORPORATION,

Defendant-Appellee.

DECIDED: May 15, 2006

Before GAJARSA, DYK and PROST, Circuit Judges.

Opinion for the court filed by Circuit Judge PROST. Dissenting opinion filed by Circuit Judge DYK.

PROST, Circuit Judge.

Applied Medical Resources Corporation ("Applied") appeals from a decision of the United States District Court for the Central District of California granting summary judgment of non-infringement of United States Patent No. 5,385,553 ("the '553 patent") in favor of United States Surgical Corporation ("U.S. Surgical"). See Applied Med. Res. Corp. v. U.S. Surgical Corp., No. SA CV 03-1267 (C.D. Cal. Mar. 7, 2005) ("Applied Opinion"). Because we conclude that there are genuine issues of material fact regarding infringement of the '553 patent given the claim construction adopted by the district court, we vacate the district court's grant of summary judgment and remand for further proceedings consistent with this opinion.

I. BACKGROUND

This is the latest in a long line of litigation between Applied and U.S. Surgical concerning the '553 patent.[1] In 2003, Applied filed this suit against U.S. Surgical, alleging that U.S. Surgical's VERSAPORT™ PLUS trocar ("the accused device") infringes claim 18 of the patent.

A. The '553 Patent

The '553 patent is entitled "Trocar With Floating Septum Seal." As the patent explains, a trocar provides a channel through the abdominal cavity through which instruments can be inserted during laparoscopic surgery. During these procedures, the surgeon inflates the abdomen with an insufflation gas in order to maintain the abdomen in a distended state. To prevent the gas from leaking out when an instrument is inserted, trocars are equipped with a valve which forms a seal around the inserted instrument. The valves include an orifice through which the instrument is inserted that allows for a variable diameter seal to be made with the instrument. Two problems can arise with the valves which result in undesirable leaking of the insufflation gas. First, during insertion, the sharp point of the instrument may cause cupping or tearing of the seal. Second, after insertion, if the instrument is operated off-axis, it may pull the orifice into a "cat-eye" shape, such that the degraded seal around the instrument permits gas to escape. '553 patent, col. 1, ll. 15-52.

The '553 patent discloses a floating seal to provide for the orifice to move to an off-axis position without deforming. Id. at col. 2, ll. 6-13. The inner portions of the

[1] For a history of the litigation between these parties involving the '553 patent, see Applied Medical Research Corp. v. United States Surgical Corp., 352 F. Supp. 2d 1119, 1121-23 (C.D. Cal. 2005).

floating seal, which define the orifice, move substantially intact so that the orifice can maintain a circular configuration around the instrument. Id.

Claim 18, the only claim asserted in this case, recites:

> An access device adapted to form an access channel across a body wall, and configured to receive a surgical instrument in the access channel, the access device comprising:
> a cannula having an axis extending between a proximal end and a distal end of the device;
> a seal housing disposed at the proximal end of the cannula and forming with the cannula the access channel of the device;
> a flexible valve disposed relative to the housing and across the access channel, the valve having elastomeric properties for forming a seal with the instrument when the instrument is disposed in the access channel;
> portions of the valve defining the orifice which is sized and configured to receive the instrument and to form the seal with an outer surface of the instrument; and
> means disposed circumferentially outwardly of the valve portions for supporting the valve portions within the seal housing, the supporting means being movable relative to the housing to permit the valve portions to float relative to the axis of the cannula.

Id. at col. 13, l. 55 – col. 14, l. 10 (emphasis added).

The ’553 patent discloses two embodiments of the invention: the “excess materials embodiment” and the “ring-levers-teeth” embodiment. The ring-levers-teeth embodiment is depicted in, for example, figures 6 and 7 of the ’553 patent, reproduced below. Figure 6, on the left, shows the structure without a medical instrument inserted. Figure 7, on the right, shows the structure with an instrument 26 inserted through the orifice 38. In this embodiment, the valve 36 is connected to levers 54 which are pivotally attached to a ring 184. This ring 184 has a diameter which is less than that of an annular recess in which it sits and can move freely within the recess. Id. at col. 10, ll. 36-40. Therefore, the ring and levers move in response to off-axis forces, carrying the inner portions of the valve with them. Id. at col. 10, ll. 41-63. The orifice in the inner

portion of the valve remains undeformed. Any deformation occurs in the outer portions of the valve. Id. at col. 10, ll. 46-49. The floating septum seal thus provides "for the undeformed movement of the orifice 38 away from the axis 96 of the trocar 10." Id. at col. 11, ll. 7-9.

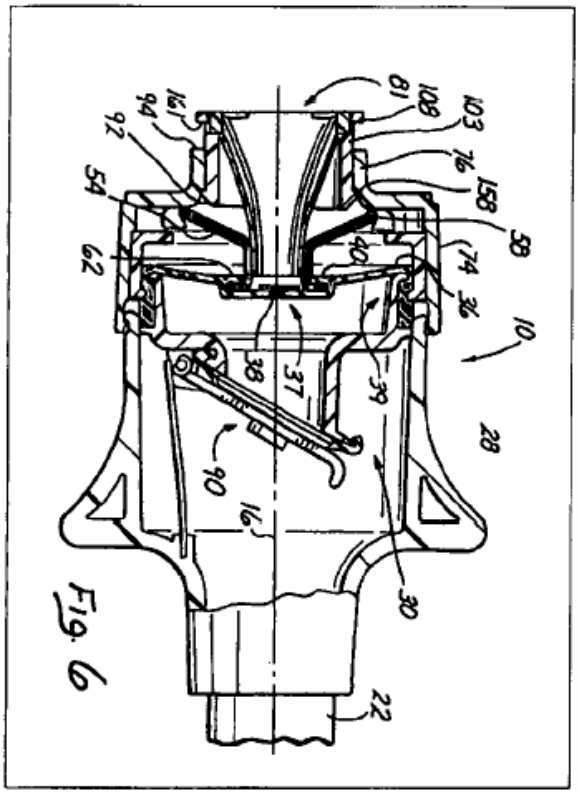


Fig. 6

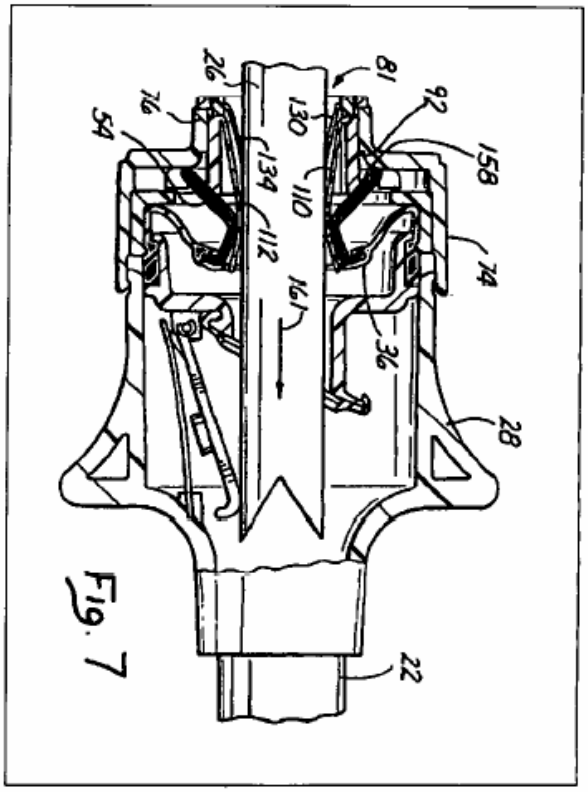
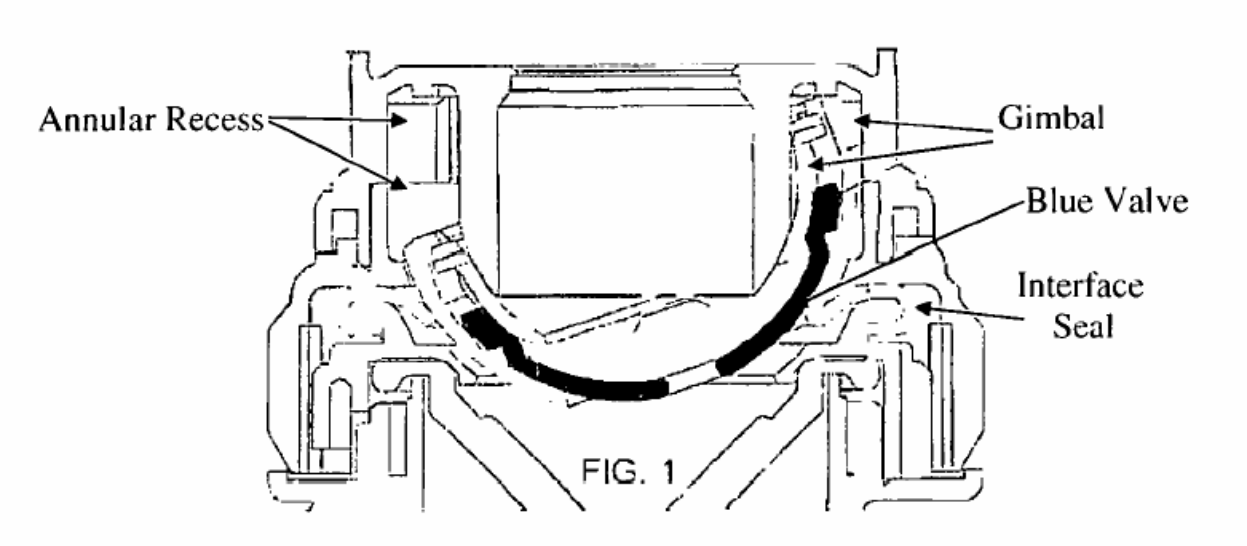


Fig. 7

B. U.S. Surgical's VERSAPORT™ PLUS Trocar

The accused device, depicted below, is also a trocar used for laparoscopic surgery that avoids the problems of cupping and tearing described in the '553 patent. According to U.S. Surgical's expert, the essential features of the device are: "(i) a flexible composite material with an orifice that is blue in color called the blue valve; (ii) a hard plastic hemisphere called a gimbal that is attached to the blue valve at its outermost portions; and (iii) a gasket that provides a seal with the rotating gimbal and the housing called the interface seal." (J.A. 284.) The gimbal responds to off-axis

forces from an instrument by rotating as a ball-in-socket joint. See also Applied Opinion, slip op. at 7-8 (describing the accused U.S. Surgical VERSAPORT™ PLUS trocar products).



C. Prior Proceedings

U.S. Surgical filed its motion for summary judgment of non-infringement on the basis that, as a matter of law, the accused device cannot satisfy the means-plus-function limitation because (1) no reasonable jury could find that the gimbal performs the identical functions of the means limitation, and (2) no reasonable jury could find that the gimbal is an equivalent structure to those described in the '553 patent specification. In support of its motion, U.S. Surgical presented evidence in the form of an expert declaration of J. Michael McCarthy. In the declaration, McCarthy applied the function-way-result test to find substantial differences between the ring-levers-teeth structure and the gimbal. He first provided definitions of the functions claimed by the means-plus-function limitation. Regarding the supporting function, McCarthy stated, "In my opinion, a person of ordinary skill in the art would understand that the supporting

function refers to reinforcement of the inner portions in contrast to the outer portions of the septum valve." (J.A. 291.) As to the permit to float function, he opined that

> the phrase 'to float relative to the axis of the cannula' refers to lateral movement of the valve portions away from the axis of the cannula (i.e., side to side movement in a plane substantially perpendicular to the axis of the cannula), with substantially no resistance to movement of the inner portions and the associated orifice.

(J.A. 291.) Based on these descriptions of the claimed functions, McCarthy concluded that the gimbal does not perform the same "supporting" or "permitting to float" function as the ring-levers-teeth structure. In addition, he described why the gimbal and ring-levers-teeth do not perform in the same way or achieve the same result.

In support of its opposition to the motion, Applied submitted a declaration from its expert Neil Sheehan ("the Sheehan declaration"). In his declaration, Sheehan disagreed with McCarthy's definitions of the functions claimed by the means-plus-function limitation and provided different definitions. Sheehan stated that the existence of the inner and outer portions of the valve do not create a substantial difference between the structures under his definition of the supporting and floating functions. He went on to explain how the two structures performed these functions in substantially the same way, to achieve substantially the same result.

The district court granted U.S. Surgical's motion for summary judgment of non-infringement. Applied Opinion, slip op. at 1. In its order, the court found that the parties agreed that the term in question is written in means-plus-function form and thus should be construed to cover the structures disclosed in the '553 patent that perform the claimed function and their equivalents. The parties also agreed that, due to collateral estoppel from a prior litigation, they could not dispute the construction of the means

clause of claim 18. Id., slip op. at 6. In prior litigation, the court determined that the specification disclosed two structures for performing the functions in the means term. Because Applied conceded that the accused devices do not contain an equivalent of the first structure, only the second is at issue in this case. This second structure was construed in the prior litigation as: "a ring that is capable of moving side to side because it has a diameter less than that of the recess that holds it, and that is connected to levers with teeth that are in turn attached to the septum valve," and refers to the rings-levers-teeth embodiment discussed above. Id.

The district court then turned to infringement of the means-plus-function limitation. Regarding identity of function, the court found that the parties agreed that two functions are required: (1) "supporting the valve portions within the seal housing," and (2) "to permit the valve portions to float relative to the axis of the cannula." Id., slip op. at 11. The district court found it undisputed that the term "valve portions" in both functions means "portions of the valve defining an orifice."

However, the court found that the parties disagreed as to what the two functions require, as the two parties' experts provided quite different definitions of how one of ordinary skill in the art would view the claimed functions. The district court chose not to construe the disputed definitions of the functions, but instead, stated in its final order: "For purposes of resolving this motion [for summary judgment], the Court adopts Applied's proposed constructions of the 'supporting' and 'float' functions." Id., slip op. at 13. Under Applied's proposed constructions, the first function, "supporting the valve portions within the seal housing" was construed as "holding the valve portions within the seal housing." The second function, "to permit the valve portions to float relative to the

axis of the cannula" was construed as "to permit the valve portions to move freely to and from the axis of the cannula." Id., slip op. at 12-13.

The district court then turned to equivalence of the gimbal and ring-levers-teeth structures under the "function-way-result" test. The court concluded, for purposes of the summary judgment motion, that the identical "supporting" and "permit to float" functions recited in claim 18 are performed by the gimbal in the accused device. Id., slip op. at 13.

In determining that the "supporting" function was performed in a substantially different way, the district court wrote:

> With respect to the supporting function, Applied's ring-levers-teeth structure supports the inner 'valve portions' of a two-portion septum valve by levers that are attached to a ring that moves from side to side. The tooth members of the levers surround the inner valve portions, holding them in the desired circular configuration and isolating them from the outer portions that are intended to deform. In contrast, it is undisputed that the entire valve in U.S. Surgical's VERSAPORT™ PLUS is supported within the seal housing by a gimbal which holds the entire valve at its outer perimeter. The ring-levers-teeth structure thus directly supports the inner valve portions of a septum valve having distinct inner and outer portions, whereas the gimbal in the VERSAPORT™ PLUS instead supports the entire valve.

Id., slip op. at 14 (citation omitted).

In determining that the "permitting to float" function was performed in a substantially different way, the district court wrote:

> As to the floating function, Applied's ring-levers-teeth structure permits the valve portions to float by mechanically separating the septum valve into two distinct portions: inner 'valve portions' that are held together or reinforced by the teeth so that they do not deform, and outer portions of the valve that have excess material which fold and unfold so that the inner valve portions can move off-axis without substantial resistance. Indeed, Applied's expert has admitted that it is this deformation of the outer portions of the septum that allows the inner valve portions to "float."

> Unlike Applied's ring-levers-teeth structure, the gimbal in U. S. Surgical's VERSAPORT™ Plus does not separate the valve into two distinct portions. When the gimbal moves, there is no deformation of any outer portions of the valve. There is no stretching or compression of the valve material, nor any folding and unfolding of excess material. Instead, the gimbal permits the orifice in the VERSAPORT™ PLUS to float by allowing the entire flexible valve to rotate in the manner of a ball-and-socket joint.

Id., slip op. at 15 (citations omitted).

Given these findings of the ways in which the gimbal and ring-levers-teeth structures performed the "supporting" and "float" functions, the court further held that the declaration of Applied's expert, Sheehan, did not raise a disputed issue of fact sufficient to defeat summary judgment. Id., slip op. at 16. Rather, the court held that particularized testimony and linking argument is required to establish equivalence. The court found that the declaration contained only conclusory and unsupported opinions because it is devoid of meaningful analysis regarding how one of skill in the art would conclude that the differences in the way the gimbal and ring-levers-teeth perform the supporting and floating functions are insubstantial. Id., slip op. at 16-18. Because it found that the Sheehan declaration did not raise a genuine issue of material fact that the differences in the way the functions are performed are insubstantial, the district court held that no reasonable jury could find that the structures were equivalent in order to find infringement. Id., slip op. at 18.

Applied timely appeals, arguing that a reasonable jury could find that the gimbal in the accused trocars satisfy the means term by performing the identical claimed functions with an equivalent structure as the disclosed ring-levers-teeth structure. U.S. Surgical responds that under any construction of the means-plus-function claim

limitation, no reasonable jury could find that the gimbal is an equivalent of the disclosed ring-levers-teeth structure. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

II. DISCUSSION

We review a district court's grant of summary judgment de novo, reapplying the standard applicable at the district court. Rodime PLC v. Seagate Tech., Inc., 174 F.3d 1294, 1301 (Fed. Cir. 1999). Summary judgment is only appropriate when "there is no genuine issue as to any material fact and . . . the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). The proper inquiry is whether the evidence is such that a reasonable jury could return a verdict for the non-movant. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986). We must draw all justifiable inferences in favor of the non-movant. Id. The moving party bears the burden of demonstrating the absence of material fact. A.B. Chance Co. v. RTE Corp., 854 F.2d 1307, 1310 (Fed. Cir. 1988).

Determining infringement requires two steps. "First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process." Carroll Touch, Inc. v. Electro Mech. Sys., Inc., 15 F.3d 1573, 1576 (Fed. Cir. 1993). A district court's "determination of the claimed function and corresponding structure of a mean-plus-function claim limitation is a question of law, reviewed de novo." ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1087 (Fed. Cir. 2003). Literal infringement of a properly construed claim is a question of fact. C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 861 (Fed. Cir. 2004).

A. Claim Construction

Our analysis begins with the claim term at issue:

> means disposed circumferentially outwardly of the valve portions for supporting the valve portions within the seal housing, the supporting means being movable relative to the housing to permit the valve portions to float relative to the axis of the cannula.

'553 patent, col. 14, ll. 5-10. The parties agree, as do we, that the term is a means-plus-function limitation recognized by 35 U.S.C. § 112, ¶ 6.

In analyzing infringement, we first review the district court's claim construction. See Carroll Touch, 15 F.3d at 1576. Claim construction of a means-plus-function limitation includes two steps. First, the court must determine the claimed function. JVW Enters. v. Interact Accessories, Inc., 424 F.3d 1324, 1330 (Fed. Cir. 2005). Second, the court must identify the corresponding structure in the written description of the patent that performs that function. Id.

The parties agree that the term claims two functions: the "supporting" function and the "permit to float" function. Appellee U.S. Surgical urges us to review the district court's construction of these functions. As discussed above, the district court did not construe what was required of the two functions. The district court instead adopted Applied's constructions for purposes of the summary judgment motion. Therefore, this court declines to construe these terms in the first instance. Since the district court adopted a claim construction for purposes of the summary judgment motion, we will

adopt that same construction for purposes of this appeal.[2]

Appellee also urges us to construe the term "valve portions" which appears in both functions of the means-plus-function claim limitation. The district court found it undisputed that the term "valve portions" in both functions means "portions of the valve defining an orifice." Before this court, U.S. Surgical argues that the "valve portions" term "refers specifically to the inner portions of a septum valve with functionally distinct inner and outer portions, and does not refer to the entire valve." However, this was not U.S. Surgical's proposed construction to the district court for purposes of this summary judgment motion. Rather, U.S. Surgical asserted that the term "valve portions" should be construed as the "portions of the valve defining an orifice." (J.A. 77.) The district court adopted this undisputed construction. If construction of the term "valve portions" is now in dispute for the first time, we again decline to construe it in the first

[2] While construction of the means-plus-function clause has no bearing on the narrow analysis we undertake on this appeal, it is unclear to us how the parties can agree that a prior court's construction of the clause is binding here under collateral estoppel, while still disputing the meaning of the function in that clause. Construction of a means-plus-function term requires first identifying the function and then determining the structure disclosed for performing that function. Thus, an attempt to reargue the scope of the function would inherently require a new analysis to determine the structures disclosed to perform the function.

instance and apply the undisputed claim construction adopted by the district court.[3]

In summary, the two functions required by the means-plus-function claim term for purposes of this appeal are: (1) holding the portions of the valve defining an orifice within the seal housing and (2) to permit the portions of the valve defining an orifice to move freely to and from the axis of the cannula.

Claim construction of a means-plus-function term next requires us to identify the disclosed structures in the patent specification for performing these claimed functions. JVW Enters., 424 F.3d at 1330. As discussed above, the parties agreed that the disclosed structure at issue in this case is the "ring-levers-teeth" structure and is construed as "a ring that is capable of moving side to side because it has a diameter less than that of the recess that holds it, and that is connected to levers with teeth that are in turn attached to the septum valve." Therefore, for purposes of this appeal, we also adopt the ring-levers-teeth structure for analyzing infringement of the two functions of the means term at issue.

[3] Further, with respect to U.S. Surgical's argument that further refinement of the construction of the term "valve portions" is required to maintain internal coherence of the claim, we note the following principles. It is certainly established that claims are to be construed to "preserve the patent's internal coherence." Markman, 517 U.S. at 390. In addition, "[i]n the absence of any evidence to the contrary, we must presume that the use of . . . different terms in the claims connotes different meanings." CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG, 224 F.3d 1308, 1317 (Fed. Cir. 2000). In other words, the use of two terms in a claim requires that they connote different meanings, not that they necessarily refer to two different structures. Id. The prosecution history, specification, comparison with other claims in the patent, and other evidence may require that two terms in a claim refer to different structures, see Phillips v. AWH Corp., 415 F.3d 1303, 1312-19 (Fed. Cir. 2005) (en banc), but preserving claim integrity does not.

B. Infringement

Using the claim construction adopted by the district court for purposes of summary judgment, we next turn to an analysis of infringement. Literal infringement of a means-plus-function claim limitation requires that the relevant structure in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification. Lockheed Martin Corp. v. Space Sys./Loral, Inc., 324 F.3d 1308, 1320 (Fed. Cir. 2003). Once the relevant structure in the accused device has been identified, a party may prove it is equivalent to the disclosed structure by showing that the two perform the identical function in substantially the same way, with substantially the same result. Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1364 (Fed. Cir. 2000). As the party asserting infringement, Applied ultimately bears the burden of proof.

Applied asserts that the gimbal in the accused device is the relevant structure and is equivalent to the ring-levers-teeth structure in the ’553 patent. Because the means-plus-function limitation here has two functions, in order to literally infringe the gimbal must perform both claimed functions and be an equivalent structure to the disclosed ring-levers-teeth embodiment in the ’553 patent specification. Equivalence of structure can be shown here if the gimbal performs both identical functions in substantially the same way to achieve substantially the same result as the ring-levers-teeth. The district court granted summary judgment on the basis that the two structures perform the claimed functions in substantially different ways. Therefore, the only issue before us is whether, under the district court’s adopted claim construction, there exists a

genuine issue of material fact that the two perform the claimed functions in substantially the same way.

Applied argues that it presented evidence demonstrating a genuine issue of fact that the two perform the claimed functions in substantially the same way. For the reasons given below, we agree.

To prove structural equivalence under the function-way-result test, the court must first determine that the accused and disclosed structures perform the identical functions. The district court assumed that the two structures here do perform the identical function, under Applied's descriptions of those functions. The court was then required to determine the way in which these functions were performed by the two structures.

1. Supporting Function

Under the district court's adopted definition of the supporting function, all that is required is that the supporting means hold the valve portions defining the orifice within the housing. The district court analyzed the way that the ring-levers-teeth structure performs the supporting function as follows:

> With respect to the supporting function, Applied's ring-levers-teeth structure supports the inner "valve portions" of a two-portion septum valve by levers that are attached to a ring that moves from side to side. The tooth members of the levers surround the inner valve portions, holding them in the desired circular configuration and isolating them from the outer portions that are intended to deform.

Applied Opinion, slip op. at 14 (citations omitted).

As explained below, this was erroneous. A court errs when it improperly imports unclaimed functions into a means-plus-function claim limitation. First, this can occur during claim construction by defining a claimed function to require more than is actually claimed. See JVW Enters., 424 F.3d at 1331. Second, the error can occur during

infringement analysis if the court improperly determines the way in which the disclosed structure performs the previously-defined function. In this step, the inquiry should be restricted to the way in which the structure performs the properly-defined function and should not be influenced by the manner in which the structure performs other, extraneous functions.

Here, the district court committed the second type of error. In its description of the way in which the ring-levers-teeth structure performs the "supporting" function, under its adopted construction of that function, the district court improperly included the way in which the structure performed extraneous functions. Nothing in the court's adopted construction of the supporting function, requires "holding [the valve portions] in the desired circular configuration," or "isolating them from outer portions that are intended to deform."[4] Rather, the defined function only requires holding the valve portions defining the orifice within the housing. Therefore, the district court improperly imported unclaimed functions when analyzing the way in which the disclosed embodiment performed the claimed function.

The district court further found the Sheehan declaration insufficient to raise a disputed issue of fact, finding it conclusory and lacking particularized testimony and linking argument necessary to establish equivalence. Applied Opinion, slip op. at 16-18. As explained below, we conclude that the declaration was not overly conclusory and

[4] The inner and outer portions of the valve are relevant to the way in which the ring-levers-teeth performs the supporting function under U.S. Surgical's definition of the function, as explained by the McCarthy declaration. However, once the district court has adopted Applied's definition of the function, it may not require isolation between inner and outer portions when analyzing the way in which the structure performs the function.

that there exists a factual issue under the claim construction adopted for purposes of this motion that the gimbal and ring-levers-teeth perform the supporting function in substantially the same way.[5]

Under the construction actually adopted by the district court, Sheehan's declaration provides an explanation as to why one of skill in the art would view both structures as supporting the valve portions in substantially the same way to achieve substantially the same result. According to the Sheehan declaration, the way in which Applied's ring-levers-teeth structure supports the valve portions in the seal housing is that "the valve portions that define the orifice are supported (via the levers) by the ring sitting in an annular recess in the seal housing." (J.A. 753.) Further, both structures "hold the valve by grasping or engaging it at a position circumferentially outward of the orifice." (J.A. 754) Applied's expert went on to describe the way in which the accused device supports as "also support[ing] by a structure (the gimbal) that sits in an annular recess in a seal housing." (J.A. 753) He therefore states that each structure supports

[5] As for the district court's finding that Applied's evidence lacked particularized testimony and linking argument, we have only required such evidence in applying the "function, way, result" test in the context of proving infringement of a claim under the doctrine of equivalents. PC Connector Solutions LLC v. SmartDisk Corp., 406 F.3d 1359, 1364 (Fed. Cir. 2005) (citations omitted). In this case, we note that Applied has satisfied even the heightened standard of providing particularized testimony and linking argument. For example, the Sheehan declaration presents evidence concerning each of the elements of structural equivalency. The declaration construes the required function, states that it is performed by the accused devices, discusses the "way" in which the embodiment and accused device perform the function, and presents data regarding the "result" of the operation of each.

Further, Applied's opposition to U.S. Surgical's motion for summary judgment provides linking argument. The brief discusses each element—function, way, and result—and refers to its evidence regarding these elements by citing to the relevant portions of the Sheehan declaration. Therefore, the expert declaration and Applied's argument provides particularized testimony and linking argument.

the valve portions with "a movable structure located proximally from the valve that supports the valve within the seal housing." (J.A. 753-54.) While the gimbal does this with annular protrusions that lock together and hold the valve in place, the ring-levers-teeth embodiment grasps the valve via "teeth" extending from the levers. Sheehan's declaration also includes an opinion that one of skill in the art would consider the differences pointed out by U.S. Surgical to relate to how the seal is formed with the housing and not to how the seal with the instrument is maintained. This difference, Sheehan declares, is unrelated to how one of skill in the art would view the focus of the invention and therefore consider the difference in structures to be insubstantial. These descriptions provide sufficient specificity to raise a material fact that these structures hold up the portions of the valve forming the orifice in substantially the same way, given the description of the supporting function adopted by the district court.

2. Permit to Float Function

Similarly, the district court erred in analyzing the way in which the structures perform the "permit to float" function after adopting Applied's description of the function. The claim limitation states: "the supporting means being movable relative to the housing to permit the valve portions to float relative to the axis of the cannula." '553 patent, col. 14, ll. 7-10. Under Applied's claim construction as adopted by the district court, the supporting means must be movable, and this movement must permit the valve portions to move freely to and from the axis of the cannula.

However, the district court again erred by importing additional functions when it determined the way in which the disclosed embodiment performs the claimed "permit to float" function. For example, the court found that the

> ring-levers-teeth structure permits the valve portions to float by mechanically separating the septum valve into two distinct portions: inner "valve portions" that are held together or reinforced by the teeth so that they do not deform, and outer portions of the valve that have excess material which fold and unfold so that the inner valve portions can move off-axis without substantial resistance.

Applied Opinion, slip op. at 15. The district court's holding thus focuses on the separation between the inner portions and outer portions in the ring-levers-teeth embodiment. However, nothing in the district court's adopted claim construction requires the following functionality from the "permit to float" function: mechanical separation of the valve into two distinct portions, inner valve portions that do not deform, outer portions that have excess material, or movement off-axis without substantial resistance.[6] This imports the functionality of the outer portions of the valve into the way in which the ring-levers-teeth structure permits the inner portions to float. The court did not explain why the outer structure is needed at all for the inner portion to still float, where its adopted claim construction of the "permit to float" function merely requires that the structure permit the valve portions defining the orifice to move freely. Therefore, the district court improperly imported unclaimed functions when analyzing the way in which the disclosed embodiment performed the claimed function.

Again, the district court also found the Sheehan declaration insufficient to raise a genuine issue of material fact that the gimbal and ring-levers-teeth perform the "permit to float" function in substantially the same way. However, under the construction actually adopted by the district court, Sheehan's declaration provides an explanation as

[6] Again, these seem relevant to the way in which the ring-levers-teeth permits the valve portions to float under U.S. Surgical's definition of the function, as explained in the McCarthy declaration.

to why one of skill in the art would view both structures as being movable to permit the valve portions to float in substantially the same way to achieve substantially the same result. According to Sheehan, the way in which Applied's ring-levers-teeth structure is movable to permit the valve portions to float is "by attaching the seal (via the levers) to a ring that can move freely because it sits in an annular recess that has a diameter greater than that of the ring." (J.A. 754.) Applied's expert went on to describe that the gimbal of the accused device permits the valve portions to float "because it is disposed within an annular recess in the seal housing such that it has room to move in response to off-axis movement of an instrument inserted through the orifice." (Id.) He concludes that each structure "is a mechanical structure that relieves stresses placed on the orifice when forces are applied by manipulation of an instrument." (Id.) Therefore, both structures perform the function by attaching the valve portions to a rigid structure, housed within an annular recess, with room to move in response to stresses placed on it.

U.S. Surgical's experts' declarations largely relied on the existence of the outer portions of the valve to explain the substantial difference between the disclosed and accused structures. U.S. Surgical therefore argues that Applied's declaration does not raise a material fact because it fails to show "how the admitted differences between the two structures could be deemed 'insubstantial' when the 'way' the ring-levers-teeth performed the 'float' function was to deform the outer portions." However, Sheehan explains why one of ordinary skill in the art would not consider the outer portions to relate to how the seal with the housing is maintained and not how the seal with the instrument is maintained. The declaration goes on to explain that one of skill in the art

would consider the focus of the invention to be about maintaining a seal against the instrument and not with the housing. Thus, that person "would not consider this to be a substantial difference in the two structures for performing the function of supporting the valve orifice to permit it to float relative to the housing." (J.A. 755.) Thus, the existence of the inner and outer portions were irrelevant to the float function as described by Sheehan's declaration. The district court adopted this definition of the float function. Given the district court's broad construction of the required functions, a reasonable jury could find that the two structures are therefore equivalent with respect to the permitting to float function under the currently adopted definition.

In summary, Applied's Sheehan declaration expressly disagreed with the definitions of the supporting and floating functions given in U.S. Surgical's McCarthy declaration. Regarding the supporting function, Sheehan stated that it merely required "holding the valve portions [i.e., the portions of the valve defining the orifice] within the seal housing." (J.A. 747.) As to the permit to float function, Sheehan stated that "[o]ne of ordinary skill in the art would understand the word 'float' in the context of the '553 patent to mean that the valve portions move easily, so as to provide for generally undeformed movement of the orifice." (J.A. 745.) The district court adopted these definitions of the functions. Based on these definitions of the claimed functions, the Sheehan declaration raises a genuine issue of material fact as to whether the gimbal is "movable relative to the housing to permit the valve portions to [move freely] relative to the axis of the cannula" in substantially the same way as the ring-levers-teeth embodiment.

III. CONCLUSION

We vacate the grant of summary judgment of non-infringement and remand for further proceedings consistent with this opinion. Adopting Applied's claim construction for purpose of this motion, as did the district court, there exists a genuine issue of material fact that U.S. Surgical's VERSAPORT™ PLUS trocar infringes claim 18 of the '553 patent.

VACATE AND REMAND

United States Court of Appeals for the Federal Circuit

05-1314

APPLIED MEDICAL RESOURCES CORPORATION,

Plaintiff-Appellant,

v.

UNITED STATES SURGICAL CORPORATION,

Defendant-Appellee.

DYK, Circuit Judge, dissenting.

I respectfully dissent from the majority's decision reversing the grant of summary judgment of non-infringement. In my view the majority's approach expands the scope of 112(6) claims contrary to our prior precedent by failing to enforce the requirement that the patentee show that the accused device perform the required function in substantially the same "way" as the patented device.

I

When a patentee chooses to claim a "means" for performing a specified function, the means clause covers only "the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112(6) (2000).

Under section 112(6), "an equivalent results from an insubstantial change which adds nothing of significance to the structure, material, or acts disclosed in the patent specification." Valmont Indus., Inc. v. Reinke Mfg. Co., Inc., 983 F.2d 1039, 1043 (Fed. Cir. 1993). In order to establish that the differences between the accused structure and

the structure disclosed in the patent are "insubstantial," the patent owner typically must prove that the accused structure performs the claimed function in substantially the same way (and achieves substantially the same result) as the structure disclosed in the patent. Ishida Co., Ltd. v. Taylor, 221 F.3d 1310, 1317 (Fed. Cir. 2000); see Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1364 (Fed. Cir. 2000) (noting that "the 'way' and 'result' prongs are the same under both the section 112, paragraph 6 and doctrine of equivalents tests"). Whether the differences between the patented structure and the accused structure are substantial is a question of fact. IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1430 (Fed. Cir. 2000); see also Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1268-69 (Fed. Cir. 1999).

II

Here it seems to me, as it did to the district court, that the patented structure performs the "float" and "support" functions in a substantially different way from the accused structure. Unlike the majority, I do not think the district court in making this determination "improperly imported unclaimed functions" into the claim.

The '553 patent discloses a "floating septum seal" for a medical device known as a trocar. A trocar provides a channel through which a surgeon can insert a medical instrument during laparoscopic surgery. The "floating septum seal" permits an instrument inserted into a trocar to move off-axis, or "float" while maintaining an airtight seal between the instrument and the trocar. '553 patent, col. 2, ll. 6-52.

The pertinent claim is claim 18, and the pertinent limitation reads:

> means disposed circumferentially outwardly of the valve portions for supporting the valve portions within the seal housing, the supporting means being movable relative to the housing to permit the valve portions to float relative to the axis of the cannula.

Col. 14, ll. 5-10 (emphases added).

The majority agrees that the district court correctly identified the functions performed by the claimed means as "(1) supporting the valve portions within the seal housing, and (2) to permit the valve portions to float relative to the axis of the cannula." Maj. Op. at 7 (internal quotation marks omitted).

As the majority recognizes, the structure that corresponds to claim 18 is the so-called "ring-levers-teeth" embodiment of the invention. In this embodiment, the valve is supported by levers which separate the valve into inner portions and outer portions. The levers (i.e., the "supporting means") grip the valve at the junction between the inner and outer portions. When an instrument moves off-axis (i.e., "floats") the inner portion of the valve remains undeformed while the outer portion deforms. Col. 10, ll. 46-49. In contrast, the accused device grips the valve at its outer perimeter, and achieves off-axis movement without deformation.

A

In describing the way in which the ring-levers-teeth structure performs the supporting function, the district court stated:

> Applied's ring-levers-teeth structure supports the inner "valve portions" of a two-portion septum valve by levers that are attached to a ring that moves from side to side. The tooth members of the levers surround the inner valve portions, holding them in the desired circular configuration and isolating them from the outer portions that are intended to deform.

Applied Med. Res. Corp. v. U.S. Surgical Corp., No. SACV 03-1267, slip. op. at 14 (C.D. Cal. Mar. 7, 2005) ("Applied Opinion") (emphasis added). The district court found that the accused structure performs the supporting function in a substantially different way

because "the entire valve in [the accused structure] is supported . . . by a gimbal which holds the entire valve at its outer perimeter." Id.

The majority does not dispute the accuracy of the district court's description of the way the patented structure performs the supporting function. Nonetheless, the majority rejects the district court's analysis because "[n]othing in the court's adopted construction of the supporting function, requires 'holding [the valve portions] in the desired circular configuration,' or 'isolating them from outer portions that are intended to deform.'" Maj. Op. at 16 (emphasis added). In the majority's view, the district court "improperly imported unclaimed functions" into the claimed "supporting" function. Id.

Although a court may not import unclaimed functions into a means-plus-function limitation, this is not a case like JVW Enterprises, Inc. v. Interact Accessories, Inc., 424 F.3d 1324 (Fed. Cir. 2005), relied on by the majority,[1] in which the district court has interpreted the function more broadly than the claim language or written description would support.[2] The district court here did not improperly redefine the function. It simply concluded that the two devices did not perform the agreed function in the same way. The analysis of the "way" a function is performed necessarily requires the use of descriptive language that is not contained in the claim itself. Our precedent reflects this reality. See, e.g., Kemco Sales, 208 F.3d 1352; Ishida, 221 F.3d at 1316-17. In Kemco

[1] Maj. Op. at 15-16.

[2] In JVW Enterprises, we rejected the district court's construction of the means-plus-function phrase "means for lockably receiving a video game controller in fixed position." 424 F.3d at 1331. The district court had construed "lockably" to include the functions of "unlocking" and "releasing." We noted the claim term "lockably," read in light of the written description, did not include these functions, and we held that the court's construction had "impermissibly added unclaimed functional limitations . . . ." Id.

Sales, for example, the disputed claim recited "a plastic envelope closing means." Id. at 1355. We construed the function "closing" to simply mean "sealing, such that entry or exit is prevented." 208 F.3d at 1361. We found that "both the accused and disclosed structures perform the identical function, which is to close the envelope." Id. at 1365. However, we held that the accused structure performed the function in a different way because, "unlike the disclosed flap, which closes by folding over the envelope, the dual-lip structure closes the accused envelope in a different way by meeting together and binding via the internal adhesive." We therefore affirmed the district court's conclusion that no reasonable jury could have found that the accused structure infringed. Id. We did not impermissibly import an unclaimed function of "folding" into the closing function when we stated that the patented structure closes "by folding over the envelope." Id. We simply described the way in which the patented structure closes.[3] The same is true here.

B

The majority makes the same error in rejecting the district court's analysis of the way the float function is performed. In analyzing the way the patented structure performs the "float" function, the district court explained:

> Applied's ring-levers-teeth structure permits the valve portions to float by mechanically separating the septum valve into two distinct portions: inner "valve portions" that are held together or reinforced by the teeth so that they do not deform, and outer portions of the valve that have excess

[3] In Ishida, the claim recited "stripping and sealing means." In upholding the district court's conclusion that the accused device performed stripping and sealing in a substantially different way from the patented structure, the court reasoned that in all embodiments of the patent, the stripping and sealing is performed by a mechanism that rotates around fixed axes. In contrast, in the accused device, the mechanism moved along a variable path. 221 F.3d at 1316-17.

> material which fold and unfold [i.e., deform] so that the inner valve portions can move off-axis without substantial resistance.

Applied Opinion, slip op. at 15. The district court found that the accused structure performs the float function in a substantially different way because "[w]hen the gimbal moves, there is no deformation of any outer portions of the valve." Id.

Again, the majority does not dispute the accuracy of the district court's description of the patented structure, but urges that the court's description of the way the "float" function is performed improperly imported "additional functions," namely "mechanical separation of the valve into two distinct portions." Maj. Op. at 19. Thus it "import[ed] the functionality of the outer portions of the valve into the way in which the ring-levers-teeth structure permits the inner portions to float." Id. Again, I disagree. The district court did not improperly import unclaimed functions. Rather, the district court simply used descriptive language to analyze the way the patented structure performs floating.

* * *

Both with respect to the "support" and "float" functions the majority opinion virtually ignores the requirement of section 112(6) that the accused device be shown to perform the function in the same way as the patented device. Because it is undisputed that the accused structure supports the valve at its outer perimeter and achieves floating without deformation, I agree with the district court that the accused structure performs the supporting and floating functions in a substantially different way from the

'553 valve.[4] I would therefore affirm the district court's grant of summary judgment of non-infringement.

[4] In the district court's view of the case (which I think was correct) the Sheehan affidavit did not raise a material fact issue. Sheehan's affidavit simply fails to recognize that the patented device performs the described functions by way of deformation and isolation between inner and outer portions, and thus does not even address the question whether the accused device performs the function in a way that is insubstantially different.