NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

WARSAW ORTHOPEDIC, INC., MEDTRONIC SOFAMOR DANEK USA, INC., MEDTRONIC PUERTO RICO OPERATIONS COMPANY AND MEDTRONIC SOFAMOR DANEK DEFFENDORF, GMBH,
Plaintiffs-Appellees,

v.

GLOBUS MEDICAL, INC.,
Defendant-Appellant.

2009-1525

Appeal from the United States District Court for the Eastern District of Pennsylvania in case No. 06-CV-4248, Judge Norma L. Shapiro.

Decided: January 26, 2011

SETH P. WAXMAN, Wilmer Cutler Pickering Hale and Dorr, LLP, of Washington, DC, argued for plaintiffs-appellees. With him on the brief were WILLIAM G.

MCELWAIN, GREGORY H. LANTIER, and AMY J. NELSON; and CYNTHIA D. VREELAND and MARK C. FLEMING, of Boston, Massachusetts.

CONSTANTINE L. TRELA, JR., Sidley Austin, LLP, of Chicago, Illinois, argued for defendant-appellant. With her on the brief was RACHEL H. TOWNSEND, Sidley Austin, LLP, of Washington, DC.

Before LOURIE, BRYSON, and PROST, *Circuit Judges*.

PER CURIAM.

Globus Medical, Inc., appeals from a final judgment of the United States District Court for the Eastern District of Pennsylvania relating to a patent infringement suit brought by Warsaw Orthopedic, Inc. Warsaw asserted three claims of U.S. Patent No. 6,530,929 ("the '929 patent") and two claims of U.S. Patent No. 7,008,422 ("the '422 patent"). The jury found each of the five asserted claims valid and infringed. Following trial, Globus moved for judgment as a matter of law ("JMOL") that the asserted claims are invalid as anticipated and are not infringed. The district court denied Globus's motions without opinion.

On appeal, Globus challenges the judgment of infringement based on the district court's claim construction. In the alternative, Globus challenges the court's denial of its motion for JMOL of invalidity based on anticipation. Because we agree with Warsaw that the asserted claims are not limited to the preferred embodiment described in the specification, we affirm the court's construction of the terms at issue on appeal. As to anticipation, we reverse the denial of Globus's motion for JMOL

with respect to claim 45 of the '929 patent and claim 42 of the '422 patent. We affirm the court's denial of the JMOL motion with respect to claims 47 and 74 of the '929 patent and claim 48 of the '422 patent. We remand this case to the district court to consider whether the damages award should be revisited in light of this decision.

I

The two patents in suit are both entitled "Instruments for Stabilization of Bony Structures," and they share a common specification. The stabilization procedure discussed in the specification involves inserting a bone screw into each of two adjacent vertebrae and connecting the two screws with a rod or connecting element, sometimes referred to as a "brace." The illustrated and described embodiment corresponds to the Sextant, Warsaw's commercial embodiment, which is depicted in Figure 1 of each of the asserted patents.

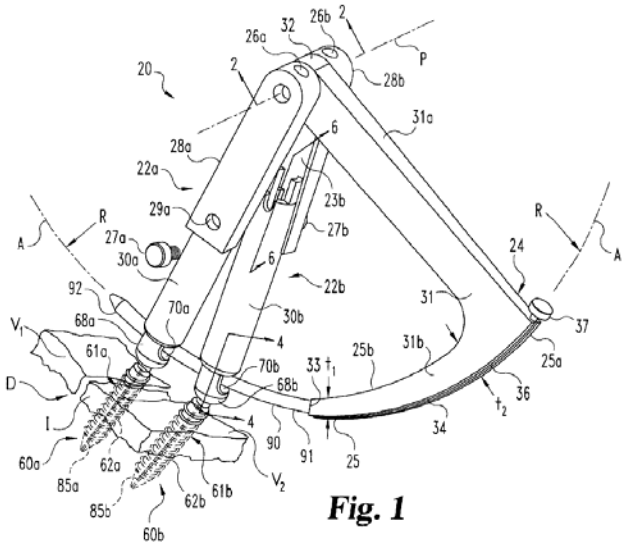

Fig. 1

As illustrated by Figure 1, the specification describes a mechanical instrument for use in spine stabilization surgery. To use the device discussed in the specification, the surgeon drills two screws or anchors (60a and 60b) into adjacent vertebrae. Each screw head contains a hole through which a connecting rod or brace (90) will be inserted to effect the desired stabilization. The surgeon then attaches anchor extensions (30a and 30b) to each anchor and attaches rod inserter (24) to the proximal end of the two anchor extensions. Attaching the rod inserter to the anchor extensions fixes the position of the inserter with respect to the anchors and fixes the location of the pivot point (32) and the pivot axis (2) about which the rod inserter pivots. As the surgeon pivots the rod inserter about the pivot axis, the device advances the rod or brace through a small hole in the patient's skin. The device pushes the rod along the path defined by arc (A) and into a corresponding hole (70a and 70b) in each anchor. The surgeon does not need to expose the patient's spine or even to see the vertebrae when inserting the rod, because the instrument is in rigid alignment with the anchors. The geometry of the structure ensures that the rod or brace will follow a predetermined path that will inevitably result in the insertion of the brace through the holes in the anchors.

II

A

Globus argues that the claims are limited to the single embodiment disclosed in the common specification. We disagree. Although the "Description of the Illustrated Embodiments" portion of the specification is devoted mainly to a detailed description of the preferred embodiment and some of its features, nothing in the specification

indicates that the invention is limited to that embodiment. To the contrary, the "Summary of the Invention" describes various "aspects" of the invention in sufficiently general terms to embrace devices that embody the concept of the invention but are not identical to the particular embodiment that is described in great detail. For example, the specification provides that in "a further aspect of the invention," there is "provided an instrument for placing a brace or connecting element into a desired position relative to at least two anchors. The instrument employs a fixed geometric relationship to guide the connecting element into a position proximate the anchors." '929 patent, col. 2, ll. 12-16; '422 patent, col. 2, ll. 17-21. The specification elsewhere discloses that the "installation instrument can employ any type of fixed geometric relationship to insert brace 90 into passageways 70a and 70b. This fixed geometric relationship can be governed [by] any one or combination of a pinned joint, a cam, a four-bar linkage, a guide member that provides a path for translational movement of brace 90, or any other mechanical relationship that would occur to those skilled in the art." '929 patent, col. 5, ll. 23-30; '422 patent, col. 5, ll. 26-33.

As this court has stated, "we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). Here, the specification does not clearly indicate that the patentee intended to deviate from the ordinary, broad meaning of the various terms at issue and limit the scope of the claims to the disclosed embodiment; indeed, the specification clearly indicates that the claims are not so limited. We therefore reject Globus's restrictive reading

of the claims as limited to the preferred embodiment depicted and described in detail in the specification.

Globus's specific challenges to the trial court's claim construction are tied to its theory that the claims are limited to the preferred embodiment described in the specification. Globus argues that the court gave unduly broad constructions to the terms "instrument" and "inserter," as well as to the phrase "an instrument associated with the connecting element."

Globus urged the trial court to construe the term "insertion instrument" to mean "a unitary device for implanting a rod or brace that includes a brace inserter, and which has a pivot axis relative to the anchors that is located outside the body." On appeal, Globus contends that the term "instrument," as used in the asserted claims, must include at least "two or more support arms that are pivotally connected to a brace inserter and each of which is connected to an anchor extension, or a brace inserter that is connected to two or more support arms which are pivotally secured to two or more anchor extensions." The trial court rejected that complex formulation and instead construed the term "insertion instrument," which is used in the asserted claims of the '422 patent, to mean "an implement for inserting something." As for the phrase "an instrument associated with the connecting element," Globus argued that it should be construed as "a unitary device for implanting a rod or brace that includes a brace inserter and a brace, and which has a pivot axis relative to the anchors that is located outside the body." Again, the court rejected that detailed and narrow definition, but concluded instead that the phrase refers to "an implement operable to place the connecting element in a predetermined location." The court thus construed the

phrase to mean "an implement for maneuvering the connecting element."

We agree with Warsaw that the patents do not assign a specific, narrow meaning to the challenged terms and that the trial court therefore properly construed those terms in light of their ordinary meanings. Because we reject Globus's challenge to the trial court's construction of particular terms used in the asserted claims, we uphold the portion of the court's judgment that Globus's accused system infringes those claims.

B

Globus argues in the alternative that if the claims are given the broad construction that Warsaw urged for them during the *Markman* proceedings, the district court should have granted its motion for JMOL of anticipation as to all of the asserted claims.

1. We focus first on the two broadest claims, which are most vulnerable to Globus's invalidity challenge. Those claims, claim 45 of the '929 patent and claim 42 of the '422 patent, are reproduced below:

> 45. A minimally invasive surgical device, comprising:
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> at least a pair of anchors positionable within a body of a patient;
>
> a connecting element positionable within the body;
>
> and an instrument associated with the connecting element, the instrument being operable to percutaneously place the connecting element in a

> predetermined location relative to the pair of anchors.
>
> 42. A minimally invasive surgical method, comprising:
>
> positioning at least a pair of anchors within a body of a patient;
>
> contacting a connecting element with an insertion instrument;
>
> referencing a position of the connecting element relative to a position of the pair of anchors; and
>
> percutaneously inserting the connecting element into a desired subcutaneous position relative to the pair of anchors.

On appeal, Globus argues that the claims as construed are anticipated by an endoscopic surgery performed in the mid-1990's by its expert witness, Dr. Paul McAfee.[1] A videotape of that surgery was played for the jury, and the procedure was described at length by Dr. McAfee as well as by Dr. Scott Tromanhauser, Warsaw's expert witness. Assisted by an endoscopic camera, Dr. McAfee inserted two screws into the patient's spine. Using a grasping instrument, Dr. McAfee inserted a

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[1] Globus relies on two references on appeal, the McAfee surgery and U.S. Patent No. 4,448,191 (the '191 patent). The '191 patent discloses a surgical technique requiring incisions that Globus's expert admitted were "significant." All of the asserted claims require a "percutaneous" insertion procedure. The district court construed "percutaneous" to mean "through a small incision or small puncture in the skin." In light of this distinction, we decline to set aside the jury's finding that the '191 patent does not anticipate the asserted claims.

connecting rod through a small hole in the patient's back and guided the rod into holes in the two screwheads. Warsaw's expert, Dr. Tromanhauser, conceded that the McAfee procedure discloses most of the elements of claims 45 and 42, including a pair of anchors and the connecting element. As part of Warsaw's infringement case, he also explained to the jury that the "predetermined location" limitation in claim 45 is met when the surgeon inserts both screws, dictating the placement of the connecting rod.

As to the validity of claim 45 of the '929 patent, the only issue on appeal is whether the McAfee procedure discloses the final element, "operable to percutaneously place the connecting element in a predetermined location relative to the pair of anchors." As to the validity of claim 42 of the '422 patent, the only issue on appeal is whether the McAfee procedure discloses the step of "referencing a position of the connecting element relative to a position of the pair of anchors."

Globus's position is that the claims, as construed, require only that the instrument assist the surgeon in positioning the connecting element so that it connects the first and second screws. Warsaw's position is that the claims require that the instrument be able to place the connecting element into the first and second screws without guidance from the surgeon. It is true, as Warsaw argues, that the Sextant places the connecting rod in the proper orientation without the need for the surgeon to guide the rod between the two screws. Once the surgeon has placed the anchors in the vertebrae and properly aligned the inserter, the Sextant will always place the connector between the holes machined in the anchors. The critical question for purposes of the validity inquiry is whether the claims require that the instrument, rather

than the surgeon, perform the function of directing the connecting element along the path between the first and second screws.

Warsaw contends that none of the asserted claims read on a method or a device in which the surgeon uses an ordinary surgical tool to manually insert a rod into the two screws. At trial, Warsaw's expert, Dr. Tromanhauser, distinguished the invention from the McAfee procedure as follows:

> The way I see this is the instrument has an operation and [the claim is] talking about the capability of the instrument, not the capability of the surgeon. Dr. McAfee's capability is to grab this rod with this general purpose instrument and watch it go into place. That's not a capability of the instrument, that's a capability of the surgeon. So the instrument is not operated—the instrument doesn't have an operation that places the rod, the surgeon does.

Warsaw's position reflects the way the Sextant works, but it is inconsistent with the limitations in claims 45 and 42, as construed. At Warsaw's behest, the court construed the final limitation of claim 45 to mean "the instrument can be operated to guide the connecting element, through a small incision or small puncture in the skin, into a location that is determined in advance." That construction does not require the instrument itself to define the path followed by the rod; under that construction, the surgeon can use the instrument to guide the rod by sight or feel from the first screw to the "location that is determined in advance," i.e., the second screw. That is precisely what the McAfee surgery discloses. The McAfee

procedure therefore anticipates claim 45 of the '929 patent under the trial court's construction.

The McAfee procedure anticipates claim 42 of the '422 patent for similar reasons. Warsaw argues that the "referencing" limitation requires that "the instrument establishes the position of the rod relative to the screws." But that argument is inconsistent with the trial court's construction of the phrase "referencing a position of the connecting element relative to a position of the pair of anchors." At Warsaw's urging, the trial court construed that limitation to mean "establishing the position of the connecting element relative to the position of the pair of anchors." Nothing about the court's construction of any of the steps of method claim 42 requires that the "referencing" or "inserting" step be performed by an instrument with little to no input or guidance from the surgeon, as opposed to by a surgeon who uses a general purpose tool to guide the connecting element by sight or feel. Thus, because the court's construction allows the referencing step to be performed either by the surgeon, as in the McAfee procedure, or by an instrument that is aligned by the surgeon, as in a procedure in which the Sextant is used, the McAfee procedure satisfies that limitation and therefore anticipates claim 42 of the '422 patent.[2]

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[2] At closing argument, counsel for Warsaw argued that claim 45 of the '929 patent refers "to a capability of the instrument," and that the "instrument itself serves as a guide." Counsel argued that the "referencing element" of claim 42 of the '422 patent "requires some sort of mechanical capability to get the rod . . . in the right place." While those remarks suggest a narrower construction of those claims, we cannot substitute counsel's argument for the broader construction given by the court and provided to the jury to guide its deliberations.

Warsaw argues that the referencing step must be performed by the instrument or the final "insertion" step would be redundant. That is not the case. As construed by the court, the referencing step requires that someone or something—the surgeon or the instrument—establish the desired position of the connecting element by reference to the two anchors. The insertion step requires placement of the anchor through a small hole in the patient's skin and into the desired position. It is therefore distinct from the referencing step. Because the McAfee procedure discloses all elements of claim 45 of the '929 patent and claim 42 of the '422 patent, we reverse the district court's denial of Globus's JMOL for invalidity on the basis of anticipation.

2. We take a different view as to the remaining claims, and we affirm the court's decision to deny Globus's motion for JMOL with respect to claims 47 and 74 of the '929 patent and claim 48 of the '422 patent. Claim 47 depends on claim 45 and requires that "the instrument comprises a mechanical guide for directing the connecting element along a predetermined path." '929 patent, col. 18, ll. 55-58. The trial court explained that "the meaning of claim 47 is clear: the instrument includes an apparatus that can mechanically guide the connecting element along its path to its ultimate location rather than simply placing the connecting element in the predetermined location." Claim 74 of the '929 patent requires that the inserter be referenced to the anchors and that the inserter itself function to move the connecting element along a predetermined path. Similarly, method claim 48 of the '422 patent requires "an insertion instrument referenced to the pair of anchors." Those limitations clearly distinguish these three claims from the McAfee prior art procedure in which the surgeon, not the instrument, performs the critical referencing and guiding functions. Accord-

ingly, the district court properly sustained the jury's finding that claims 47 and 74 of the '929 patent and claim 48 of the '422 patent are not invalid.

In sum, we reverse the judgment as to claim 45 of the '929 patent and claim 42 of the '422 patent. We affirm the judgment as to claims 47 and 74 of the '929 patent and claim 48 of the '422 patent. We remand this case to the district court to determine if the calculation of damages must be reevaluated in light of the modification of the judgment.

Each party shall bear its own costs for this appeal.

AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED