United States Court of Appeals for the Federal Circuit

GREGORY W. BARAN, M.D.,
Plaintiff-Appellant,

v.

MEDICAL DEVICE TECHNOLOGIES, INC.,
Defendant-Appellee,

AND

AMT SVERIGE, AB (FORMERLY KNOWN AS AMEDIC) AND ASCENDIA AB,
Defendants,

AND

GEDON AB AND ANDERS H. WEILANDT,
Defendants.

2010-1058

Appeal from the United States District Court for the Northern District of Ohio in case No. 04-CV-1251, Judge Kathleen M. O'Malley.

Decided: August 12, 2010

STEVEN M. AUVIL, Benesch, Friedlander, Coplan & Aronoff, LLP, of Cleveland, Ohio, argued for plaintiff-appellant. With him on the brief was BRYAN J. JAKETIC.

MONICA L. THOMPSON, DLA Piper LLP (US), of Chicago, Illinois, argued for defendant-appellee. With her on the brief was STEVEN J. REYNOLDS.

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

BRYSON, *Circuit Judge*.

Dr. Gregory W. Baran filed suit against the defendants (collectively, "MDTech"), alleging infringement of U.S. Patent Nos. 5,025,797 and 5,400,798. The '798 patent is a continuation-in-part of the '797 patent, and both patents are directed to automated biopsy instruments. For the reasons stated below, we affirm the district court's entry of judgment in favor of MDTech as to both patents.

I

In the automated biopsy instruments that are the subject of this appeal, the biopsy needle is composed of a stationary stylet and a retractable cannula that slides over the stylet. After the cannula is pulled back against a coil spring and cocked in the "charged" position, the stylet is inserted into the patient's body. When the cannula is released from the charged position, the spring drives the cannula forward over the inserted stylet to cut out a biopsy sample. The entire needle is then removed from the patient and the biopsy sample is extracted from the cannula.

The claimed devices are charged by pulling back an external guide (to which the cannula is attached) along the shaft until the guide locks in place. The locking function is performed by a lever (22 in Figure 4, below) that slides into a slot. Pressing the other end of the lever releases the lock and allows the spring to send the cannula forward over the stylet.

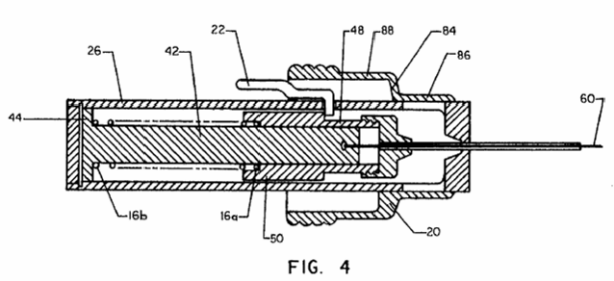
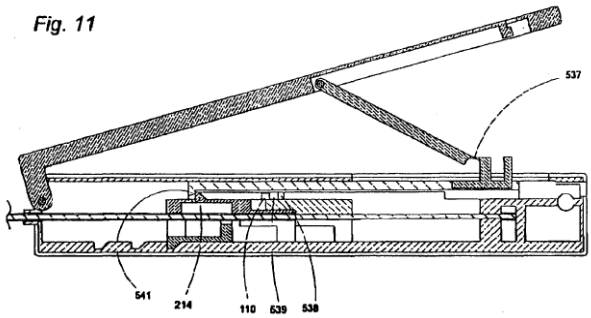


FIG. 4

'797 patent, fig. 4; '798 patent, fig. 4.

In MDTech's accused device, the BioPince Full Core Biopsy Instrument ("BioPince"), the instrument is charged by means of a slider-crank mechanism. The user lifts the crank arm away from the device, which pushes a connected slider unit to the front of the device where it latches onto the cannula guide. The user then presses the crank arm down toward the device, which pushes both the slider and the cannula guide to the rear of the device. A locking tab inserts through a slot in the crank arm and locks the device in the charged position. Pressing a trigger button at the back of the device detaches the cannula guide from the slider, allowing the spring to send the cannula and its guide forward. The following figure is taken from MDTech's patent and is an accurate representation of MDTech's commercial device:



U.S. Patent No. 6,322,523 B2, fig. 11.

Claim 2, the only asserted claim of the '798 patent, reads as follows (emphases added):

> An apparatus for acquiring biopsy specimens, the apparatus comprising in combination:
>
> a) a biopsy actuator;
>
> b) a cannula having a predetermined inner diameter and having a distal end for insertion into a patient and having an opposing proximal end, said proximal end having a *first connector means* secured thereto;
>
> c) a stylet means . . . said stylet means being *detachable* from said cannula;
>
> d) said biopsy actuator comprising a *second connector means for releasably and fixedly engaging the first connector means*, wherein the first connector means and the second connector means are

> movable as a unit during acquisition of the biopsy specimen,
>
> e) said biopsy actuator comprising means for rapidly advancing the distal end of said cannula beyond the distal end of the stylet means to acquire a core biopsy specimen.

The district court construed the term "detachable" in claim 2 to mean that "the stylet is capable of being separated or withdrawn from the cannula without loss or damage." The court found it significant that the specification disclosed both a reusable embodiment and a single-use embodiment, and that only the stylet of the reusable embodiment was described as being "detachably engaged" while the stylet of the single-use embodiment was described as being "adhesively bonded." The court rejected the argument that an adhesively bonded stylet could also be detachably engaged. Moreover, although the court acknowledged that the construction of "without loss or damage" might exclude the single-use embodiment from claim 2, the court noted that it was not necessary for each claim to cover every embodiment of the patent.

The district court construed the term "releasably" in a similar manner, as requiring "separation without loss or damage." The court noted that claim 2 recited the second connector means as being "releasably engag[ed]," and that the specification described the same structure as being "detachably affixed." Accordingly, the court reasoned that the patentee had used the terms "releasably" and "detachably" with a similar meaning in mind. Based on that cross-usage, the court applied essentially the same construction to both terms.

Following the issuance of the claim construction order, Dr. Baran entered a stipulation acknowledging that he could not prove infringement of the '798 patent under the "without loss or damage" construction as applied to the terms "first connector" and "second connector." Dr. Baran reserved his right to appeal the claim construction order.

As for the '797 patent, the district court granted summary judgment of noninfringement on the ground that the accused BioPince device failed to satisfy two limitations relating to the charging mechanism. Claim 7, the only asserted claim of the '797 patent, reads in pertinent part (emphases added): "A biopsy instrument comprising . . . a manually operable charging *member* for moving the guide to the charged position against the urging of the coil spring, and a *release means for retaining the guide in the charged position*."

The district court first considered whether the term "member" should be limited to a single component or whether it could encompass a multi-component structure. The court ultimately adopted a construction that allowed for the use of multiple components, but only if those components operated in unison and not in a serial chain of events. The court determined that the various components of the slider-crank mechanism in the BioPince device did not act in unison to move the cannula into the charged position, and it therefore concluded that the device did not satisfy the "charging member" limitation of the '797 patent.

In addition, the court concluded that the BioPince device did not satisfy the limitation reciting a "release means for retaining the guide in the charged position." The court construed that limitation to be in means-plus-

function format and to have two functions—retaining the guide in the charged position and releasing the guide from the charged position. The court then addressed whether the BioPince device had corresponding structure that performed the retention/release function. Dr. Baran contended that the relevant corresponding structure in the accused device was the combination of the crank arm and the locking tab that holds the crank arm in the charged position. Inserting the locking tab through the appropriate slot in the crank arm would retain the guide in the charged position; pulling the crank arm up and snapping it out of the locked position would release the cannula guide from the charged position. Therefore, Dr. Baran argued, the crank arm and the locking tab constituted a structure in the accused device that performed both the retention function and the release function. The court accepted that argument over MDTech's objection that the only proper method of release was the trigger mechanism, which did not perform the retention function. The court ruled that the crank arm qualified as a means for performing the release function in the BioPince device because discharging the device in that manner did not require physical alteration of the device. Nevertheless, the court found no infringement because it concluded that the crank arm and locking tab structure was substantially different from the corresponding lever structure disclosed in the specification of the '797 patent.

II

A

In his challenge to the district court's construction of the '798 patent, Dr. Baran advocates a definition for the terms "detachable" and "releasably" that does not include the "without loss or damage" condition. Dr. Baran objects

to that condition because it excludes the single-use embodiment from the asserted patent claim and therefore precludes his infringement claim against the BioPince, which is a single-use device.

As an initial matter, we accept Dr. Baran's assertion that the '798 patent "never discloses a stylet that is joined to a cannula." The specification indicates that the stylet 60 is attached to a support rod 14, and that the cannula 66 is attached to a spring guide 18. The full needle is then assembled by placing a coil spring "coaxially" onto the stylet and placing the cannula "telescopically" over the stylet and coil spring. The cannula remains an independent component that slides freely over the stylet.

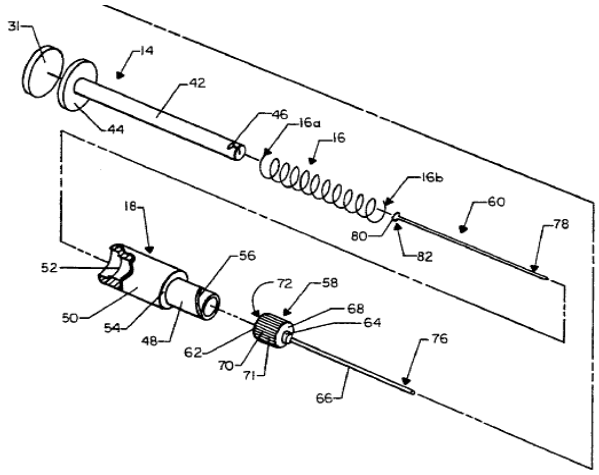


FIG. 1

The fact that the stylet is not attached to the cannula, however, is not favorable to Dr. Baran. If anything, it lends further credence to the district court's construction of "detachable" as meaning "separation without loss or damage," because the stylet and cannula as described in the specification are readily separable without loss or damage.

Of greater significance is the different language used by the patentee to distinguish the single-use embodiment from the reusable embodiment. In describing the reusable embodiment, the patent states that "the stylet 60 is received and detachably engaged within the clevis 46 of the spring guide 18. The thread 74 on the inner surface 72 of the collar 62 is engaged with the thread 56 on the spring guide 18 to secure the cannula mount 58 to the spring guide." '798 patent, col. 7, ll. 42-46. Figure 1 shows that the stylet is inserted into a notched recess on the support rod from which it can be easily removed,[1] and that the cannula is screwed onto the spring guide from which it too can be easily removed.

By contrast, in describing the single-use embodiment, the patent states that the assembly of the device is "quite similar" except that "the stylet 262 is adhesively bonded within the recess 246, and the base 262 of the cannula mount 258 is similarly secured within the bore 255a." '798 patent, col. 10, ll. 22-27. Figure 5, which corresponds to the single-use embodiment, shows that the clevis is absent from the support rod, and that the screw threads are absent from the spring guide. Instead, the stylet and the cannula are glued permanently into the support rod and the spring guide, respectively.

[1] Although the specification states that the stylet is inserted into the clevis of the "spring guide," Figure 1 clearly shows that the clevis is located on the support rod.

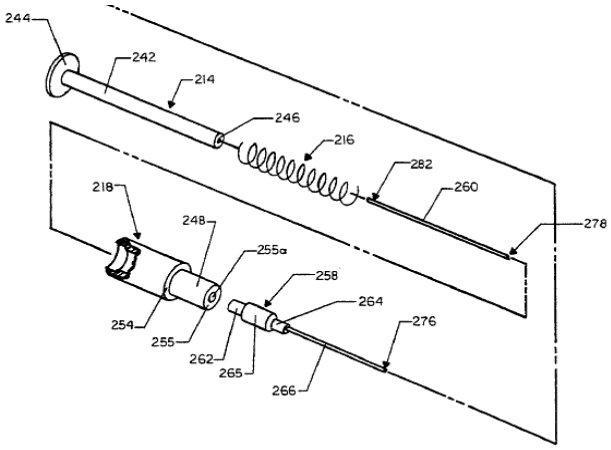


FIG. 5

The patentee used the term "detachably" in the specification to draw a direct contrast between the removable components of the reusable embodiment and the adhesively bonded components of the single-use embodiment. That usage effectively concedes that adhesively bonded components—including the single-use embodiment—are not "detachable" components within the meaning of the patent. We agree with the district court that "[t]his distinction suggests that the patentee intended 'detachable' to mean capable of removal or separation without breaking or causing damage through the necessary use of undue force." *Baran v. Med. Device Techs., Inc.*, 519 F. Supp. 2d 698, 724 (N.D. Ohio 2007); *see also K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1365 (Fed. Cir. 1999) ("Screws, unlike rivets and [adhesive] laminates, are meant to be unscrewed, that is, to be removed. A rivet or a laminate, to the contrary, is meant to remain permanent, unremovable unless one is bent on breaking the permanent structure apart."). Incorporating the "without loss or damage" condition into the claim construction has the additional advantage of comporting with the plain

meaning of "detachable," as expressed by the several dictionary definitions cited by the district court.

We also agree with the district court that the terms "releasably" and "detachable" have the same meaning in the '798 patent. Dr. Baran argues that the use of different terms implies that they have different meanings, *see CAE Screenplates Inc. v. Heinrich GmbH*, 224 F.3d 1308, 1317 (Fed. Cir. 2000), but that implication is overcome where, as here, the evidence indicates that the patentee used the two terms interchangeably. *See Tehrani v. Hamilton Med., Inc.*, 331 F.3d 1355, 1361 (Fed. Cir. 2003).

In a final attempt to bring the single-use embodiment within the scope of the asserted claim, Dr. Baran argues that the district court's claim construction improperly excluded a preferred embodiment and ignored the Summary of the Invention. There is no force to either of those arguments. It is not necessary that each claim read on every embodiment. In this instance, while claim 2 reads on only the reusable embodiment, a different claim of the '798 patent (claim 18) reads on both the single-use and the reusable embodiments,. *See Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008) ("It is often the case that different claims are directed to and cover different disclosed embodiments."); *Intamin Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1336-37 (Fed. Cir. 2007) ("[A] claim need not cover all embodiments."). As for the excerpt from the Summary of the Invention, it simply repeats verbatim the claim language that the "stylet means is . . . detachable from the cannula" and that the "second connector . . . releasably and fixedly engages the first connector." '798 patent, col. 3, ll. 50-60. The fact that those claim terms were used in the Summary does not mean that they must be read to encompass all the embodiments of the invention.

Because we do not disturb the district court's construction of "releasably," or the related constructions of "first connector means" and "second connector means," Dr. Baran's stipulation of noninfringement of the '798 patent remains effective.

B

Dr. Baran also appeals the two grounds on which summary judgment was entered as to the '797 patent. We conclude that no reasonable juror could find that MDTech's BioPince device satisfies the means-plus-function limitation of "release means for retaining the guide in the charged position." That determination is sufficient to affirm the district court's judgment of noninfringement; accordingly, we do not address Dr. Baran's additional arguments regarding the "charging member" limitation.

In construing a means-plus-function claim, the district court must first determine the claimed function and then identify the corresponding structure in the written description of the patent that performs that function. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). In order to prove literal infringement of a means-plus-function claim, the plaintiff must show that the accused device performs the recited function through structure that is the same as or equivalent to the corresponding structure set forth in the specification. 35 U.S.C. § 112, ¶ 6.

Dr. Baran argues that the district court erred in construing the claim to require both a release function and a retention function. According to Dr. Baran, "release" precedes the "means for" clause and therefore "is a modifier of the limitation, rather than a functional recitation."

He urges that "release" should be construed to mean "releasable," which he explains is a characteristic and not a function. Presumably, Dr. Baran believes that distinction to be significant because a characteristic would describe something the structure is merely capable of performing, not something the structure must perform.

We agree with the district court that the claim language recites both a release function and a retention function. Dr. Baran's argument regarding the placement of the term "release" is unavailing. The relevant inquiry is whether the term at issue is purely functional. *See Signtech USA, Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1356 (Fed. Cir. 1999) (construing "ink delivery means" to be equivalent to "means for ink delivery" because "ink delivery" was purely functional language); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1318 (Fed. Cir. 1999) ("[W]hen it is apparent that the element invokes purely functional terms . . . the claim element may be a means-plus-function element despite the lack of express means-plus-function language."). In the context of the '797 patent, the term "release" is not an idle description but a vital function to be performed by the means-plus-function element. The patent does not recite a biopsy instrument that retains indefinitely without release; rather, the contemplated function is to retain for the express purpose of producing a spring-loaded release on demand. The claim language ties both functions to the same means-plus-function element, so it is appropriate that the element be construed accordingly.

In the alternative, Dr. Baran argues that the question whether the crank arm and locking tab structure fulfills the retention/release limitation raises a disputed issue of material fact and was not suitable for resolution on summary judgment. The district court concluded that the

accused structure was substantially different from the disclosed structure because the BioPince device requires the locking tab to flex in a yielding manner for the release to occur, while the patented invention relies on a lever that must be rigid in order to pivot on its fulcrum. Dr. Baran disagrees with the district court's characterization and claims that both structures flex to release the guide. He bases that contention on two passages from the '797 patent: the first states that one end of the lever is "flexibly secured" to the other end by a "spot weld," i.e., the fulcrum; the second states that the release lever is "flexibly welded" to the outer casing.

Again, we find that the district court did not err in concluding that the accused structure was not equivalent to the structure described in the specification. The two structures rely on opposing principles: the lever facilitates the release by clearing the retention means from the path of the guide, while the locking tab mechanism achieves release only by overcoming the full resistance of the retention means. Because of that structural difference, the lever must be rigid to release the guide, while the locking tab must be flexible to do the same. The references to "flexibility" that Dr. Baran cites from the patent refer to the fact that the lever remains free to pivot flexibly along the fulcrum, not that the lever itself is made of flexible material. Indeed, it would be impossible to operate a lever if it were made of highly elastic material, just as it would be impossible to bypass a locking tab if it were made of stiff, unyielding material. Accordingly, we concur with the district court that the accused structure is substantially different from the disclosed structure and therefore does not infringe pursuant to section 112, paragraph 6.

III

We also find no merit in Dr. Baran's argument that the district court erred by striking portions of the declaration that he submitted in opposition to MDTech's motion for summary judgment. The declaration was a detailed, 22-page report attesting to Dr. Baran's qualifications as an expert, describing the asserted patent claims and the accused device, and offering extensive opinion testimony in support of his theories of infringement. The court found that the "vast majority of [Dr.] Baran's declaration is opinion testimony based on 'scientific, technical, or other specialized knowledge within the scope of Rule 702,'" and that it was, "as a practical matter, an expert report in which he provides his infringement opinion." *Baran v. Med. Device Techs., Inc.*, 666 F. Supp. 2d 776, 779 n.2 (N.D. Ohio 2009). The court further found that Dr. Baran had not identified himself as an expert, as required by Federal Rule of Civil Procedure 26(a)(2), and that his "expert report" was submitted well after the deadline for exchanging expert reports established by the court's case management plan. As a result, the court held that it would not consider Dr. Baran's declaration "to the extent it provides expert testimony." *Id.*

Dr. Baran argues that his report should not have been ruled untimely, because he was not a witness "retained or specially employed to provide expert testimony" and therefore was not required to prepare a written report pursuant to Federal Rule of Civil Procedure 26(a)(2)(B). But the fact that Dr. Baran was not required to prepare a written report in the first instance does not mean that he was exempt from the district court's case management deadlines once he opted to submit a written report. The district court had broad discretion to fashion its case management deadlines, and those deadlines applied to all

expert reports, including ones not required by rule. *See Clarksville-Montgomery County Sch. Sys. v. U.S. Gypsum Co.*, 925 F.2d 993, 998 (6th Cir. 1991); *see also Esposito v. Home Depot U.S.A., Inc.*, 590 F.3d 72, 77-78 & n.2 (1st Cir. 2009). The district court was justified in excluding Dr. Baran's report to enforce compliance with those deadlines.

AFFIRMED