

# United States Court of Appeals for the Federal Circuit

00-1160

SMITH & NEPHEW, INC. and JOHN O. HAYHURST, M.D.,

Plaintiffs-Appellants,

v.

ETHICON, INC.,

Defendant-Appellee.

John M. Skenyon, Fish & Richardson P.C., of Boston, Massachusetts, argued for plaintiffs-appellants. With him on the brief were Mark J. Herbert, and Jeffrey L. Snow.

Vicki Ann Margolis, Venable, Baetjer, Howard & Civiletti, LLP, of Washington, DC, argued for defendant-appellee. With her on the brief were George F. Pappas, and Mitchell Y. Mirviss.

Appealed from: United States District Court for the District of Oregon

Judge Malcolm F. Marsh

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DECIDED: December 12, 2001

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Before NEWMAN, MICHEL, and GAJARSA, Circuit Judges.

Opinion for the court filed by Circuit Judge NEWMAN. Dissenting opinion filed by Circuit Judge MICHEL.

NEWMAN, Circuit Judge.

Smith & Nephew, Inc. and John O. Hayhurst, M.D. (together "S&N") appeal the summary judgment of the United States District Court for the District of Oregon, holding that Ethicon, Inc. did not infringe, induce infringement, or contribute to infringement of United States Patent No. 5,601,557 ("the '557 patent") entitled "Anchoring and Manipulating Tissue."<sup>1</sup> We vacate the summary judgment and remand for further

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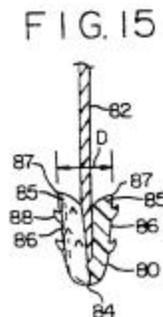
<sup>1</sup>

Smith & Nephew, Inc. v. Ethicon, Inc., No. 98-76-MA (D. Ore. Dec. 17, 1999).

proceedings.

## BACKGROUND

Bones are composed of two kinds of bony tissue -- a relatively thin, harder outer shell called "cortical bone" and a softer inner bone material called "cancellous bone." The '557 patent is directed to a method of affixing a suture within a bone by inserting a suture anchor having resilient legs into a hole drilled into the bone. After the anchor is pushed into place the resilient legs automatically expand into the cancellous bone, anchoring the suture. The specification states that "Whenever tension is applied to the suture, the ends of the legs dig into the bone and resist removal of the anchor member from the hole." The invention is illustrated in the '557 patent as follows:



The '557 specification explains:

Once expelled from the needle into the hole, the resilience of the anchor member urges the outer edges of the legs to bear upon the bone within the hole. With the outer edges **87** of the legs bearing upon the bone, any tension applied to the suture **82** causes the sharp edges **87** to dig into the bone to secure the anchor member within the hole. The barbs **88** also dig into the bone to supplement the anchoring effect of the legs **86**.

Preferably, the anchor member is sized so that when it is positioned within the hole, the outer edges of the legs are beneath a relatively dense bone layer that is located at the surface of the bone, and is known as the cortical layer. As a result, tension in the suture (in conjunction with the intrinsic resilient force of the anchor member that forces the leg edges apart) tends to lodge the edges of the anchor member legs beneath the cortical layer, rendering the anchor member substantially irremovable from the hole.

'557 Patent, col. 9, lines 42-60. Claim 1, the broadest claim, follows:

1. A method of anchoring in bone a member and attached suture, comprising the steps of:
  - forming a hole in the bone;
  - attaching a suture to a member;
  - lodging the member within the hole by pressing the member with attached suture into the hole; and
  - attaching tissue to the suture so that the tissue is secured against the bone.

Surgeons are instructed to tug on the suture after the anchor is pressed into the bone, to assure that it is securely seated. After the anchor is secure, the suture is used to re-attach damaged tissue, such as a ligament or tendon, so that it is correctly placed during healing.

The Ethicon anchor bearing a suture, pictured below, is also pressed through a needle into a hole drilled in the bone:



Ethicon states that instead of the resilient spreading of the S&N anchor legs after the anchor enters the bone, the Ethicon anchor has two or four legs or "arcs" that are spread into the bone by manipulation by the surgeon, who "sets" the legs by pulling backward on the suture, causing the legs to spread and to prevent further movement. S&N disputes this mechanism, stating that the Ethicon legs are resilient and recover their shape when expelled from the needle.

Ethicon moved for summary judgment of noninfringement on the ground that the setting action assertedly required for its anchor, whereby the surgeon pulls on the suture to

spread the arcs of the anchor and drive them into the bone, avoids infringement of correctly construed claims. Ethicon argued that the clause "lodging the member within the hole by pressing the member with attached suture into the hole" limits the '557 claims to a method wherein the anchor is permanently and fixedly embedded in the bone upon being pressed into the hole, without any further manipulation or movement. Ethicon stated that its anchor moves "significantly" on the surgeon's pull, and thus is not "lodged" without this manipulation. Ethicon states that the movement of its anchor averages 1.1 to 1.8 millimeters. The amount of movement of the Ethicon anchor was disputed, S&N stating that the Ethicon tests used degraded pig bone and involved the application of excessive force.

The district court referred the claim construction issues to a magistrate judge, who construed the "lodging the member" term as follows:

This phrase requires that the member, once pressed into the hole, may not be removed.\* However, this phrase does not require that the member be immovable when pressed into the hole, nor does it preclude movement or manipulation after lodging. Therefore, once the member is pressed into the hole, some manipulation may occur, but manipulation beyond pressing must not be necessary in order to secure the member in the hole. The further movement that is permitted, but not required, may or may not result in the device being even more securely lodged in the bone. For instance, tension on the suture may, in some configurations result in further deformation of the portion of the device in the cancellous layer of bone resulting in an even more secure placement of the device. The key is, however, that this may make the device even harder to remove from the bone, it is not required to keep it within the bone.

Upon Ethicon's motion for clarification, the magistrate judge added the following footnote to the first sentence, at the asterisk:

\* Therefore, "lodged" means that the device is ready to secure tissue to the bone.

The magistrate judge provided no explanation of the footnote, and the parties debate its meaning. Ethicon states that the footnote means that all movement of the anchor is

excluded after it is pressed into the hole, since an anchor that moves is not "ready to secure tissue to the bone," and that the claim is limited accordingly. S&N states that this interpretation contradicts the several statements of the magistrate judge that there is no requirement that the anchor be immovable immediately after it is inserted, stressing the magistrate judge's explicit statement that the claim "does not preclude movement or manipulation after lodging."

The district court accepted the magistrate's claim construction, but also accepted Ethicon's view that the "lodging the member by pressing" step of claim 1 requires an anchor that need not be pulled by the surgeon before the suture is attached to tissue. The court ruled that if pulling to set the anchor is required, there can not be infringement. The district court concluded that "in the absence of some evidence that the step of applying pressure to the suture anchor is, in fact, a needless step, there is no evidence from which a reasonable juror could conclude that surgeons using the accused suture anchors directly infringe the '577 patent."

The district court concluded that in the Ethicon method the suture is not ready to secure tissue when the anchor is pressed into the hole, but only after a subsequent pulling/seating step. On this claim construction, the district court granted summary judgment of non-infringement, both literal and under the doctrine of equivalents.

## DISCUSSION

### I

Claim construction is reviewed as a matter of law, including de novo determination of any fact-based issues underlying the legal conclusion of claim scope, without deference to the rulings of the district court. Cybor Corp. v. FAS Technologies, Inc., 138 F.3d 1448, 1456, 46 USPQ2d 1169, 1174 (Fed. Cir. 1998) (*en banc*). The question of infringement,

which was decided on Ethicon's motion for summary judgment, is reviewed for correctness on the record before the district court, drawing all reasonable inferences in favor of the non-movant S&N.

S&N states that the district court's claim construction is incorrect, in that it departed from the magistrate judge's correct construction that the claim "does not preclude movement or manipulation after lodging." S&N points out that the magistrate judge rejected Ethicon's requested construction that no further movement or manipulation of the anchor is permitted by the claim. S&N also states that it is irrelevant whether further movement or manipulation of the anchor occurs within the bone, for that limitation is not included in the claim. Thus S&N argues that the district court erred in construing the claim as barring any movement or manipulation of the anchor by the surgeon after the anchor has been inserted in the bone.

We conclude that the magistrate judge correctly ruled that the term in claim 1 of "lodging the member within the hole by pressing the member with attached suture into the hole" does not bar the surgeon's tug and any ensuing small movement of the anchor after insertion. The claim construction was correct that "lodging" means that the anchor can not be withdrawn after it is pressed into the hole, and that "further movement . . . is permitted, but not required." This construction does not preclude the action whereby the surgeon tugs on the suture after insertion. Both sides agreed that any prudent surgeon would assure that an anchor is seated within the bone structure. In the S&N method the pull on the anchor tests whether it is lodged, because the legs automatically spread into the cancellous layer of bone; the pull confirms that the legs have spread. There was evidence before the district court that both sides issue instructions that surgeons should perform such a pulling step.

The Ethicon anchor, according to Ethicon, is not lodged until after the surgeon pulls

on the suture, Ethicon stating that it is the ensuing movement through the bone that spreads the legs, and that without this manipulation the Ethicon anchor is not "lodg[ed] within the hole" as set forth in claim 1. S&N disputes this view of the Ethicon method, and also argues that even if a pulling step were necessary to lodge the Ethicon anchor, the claims are infringed because all of the claim steps are performed, whether or not this additional pulling step is also performed.

Ethicon also argues that S&N is estopped from a claim construction covering a method that requires or employs manipulation or movement of the anchor after it is pressed into the hole, pointing to arguments made during prosecution of the '557 patent to overcome a reference to Freedland. Ethicon is partly correct, for estoppel arises, but not to the extent proposed by Ethicon. The Freedland reference shows a fastener inserted into a hole drilled into a broken bone at the fracture; the fastener serves not as a suture anchor, but as a device for holding the fracture together during healing. The Freedland fastener has arms that project into the cancellous bone tissue in the area of the fracture, but the arms of the fastener must be extended by manipulation. In the Freedland method the surgeon uses forceps to pull on a cord that extends through a tube, opening the Freedland fastener like an umbrella, thereby pinning itself inside the hole in the bone and stabilizing the bone against movement while the fracture heals.

During prosecution of the '557 patent the inventor, Dr. Hayhurst, argued that a difference between his invention and that of Freedland is that the '557 anchor is securely embedded simply upon pressing it into the hole where it resiles into the cancellous bone, and that no further manipulation of the anchor is necessary. At his deposition Dr. Hayhurst repeated this description of how his invention works. Ethicon states that the inventor thus disclaimed coverage of its anchor that requires manipulation to move it into place and open its legs. S&N responds that the Ethicon anchor does not require such manipulation,

and that the surgeon's "pull" on both the '557 anchor and the Ethicon anchor after they are pushed into the hole is not a Freedland-type manipulation to open a closed device in a fracture, but a routine cautionary safeguard to assure that the anchor is in place in the bone. S&N states that the '557 inventor did not disclaim his own procedure which included this safeguard of pulling on the anchor, and that Dr. Hayhurst merely distinguished Freedland's elaborate manipulation that opens an umbrella-like fastener inside a fractured bone.

We agree with the magistrate judge that the '557 claims, correctly construed, neither exclude nor require a surgeon's tug to assure that the anchor is set within the cancellous bone, and do not preclude a small movement as a result of that tug. A claim interpretation that would exclude the reasonable practice of the method taught in the patent "is rarely the correct interpretation; such an interpretation requires highly persuasive evidentiary support." Modine Mfg. Co. v. United States Int'l Trade Comm'n, 75 F.3d 1545, 1550, 37 USPQ2d 1609, 1612 (Fed. Cir. 1996).

Ethicon is incorrect in its assertion that since a pulling step (sometimes called a "tensioning" step) is "necessary" to set the Ethicon anchor, the step of pulling on the anchor must be included in the '557 claims in order for the claims to be infringed. Our colleague in dissent has adopted Ethicon's argument, and would hold that since the step of tugging on the anchor is not stated in the '557 claims, the claims can not be infringed. However, claims are infringed when all of the steps thereof are performed, unless the invention itself is the elimination of additional steps. The '557 patent, its specification, prosecution history, and testimony in the summary judgment proceeding, make clear that the instruction to surgeons to tug on the anchor before using it is a matter of prudent surgical practice, not a limitation of claim 1.

Both parties point to claim 6 of the '557 patent, which includes the limitation that the

anchor is not "manipulated":

6. A method of anchoring in bone a member and attached suture, comprising the steps of:  
providing a deformable member having a width dimension "D";  
attaching a suture to the member;  
forming a hole in a bone in a manner such that the hole has a diameter that is not greater than the width dimension "D"; and  
inserting the member into the hole with the member oriented such that the member lodges within the hole in the absence of any manipulation of the member other than inserting the member into the hole.

Ethicon states that claim 6 shows that S&N's invention excludes manipulation of any sort after insertion of the anchor, while S&N states that this claim describes a preferred embodiment, in accordance with the doctrine of claim differentiation. This doctrine reflects the presumption that separate claims are of different scope. See Irving Kayton, 1 Patent Practice (6th ed.) 3.1, 3.3 (1995):

[P]atent practitioners typically draft a series of claims approximating a spectrum of patent protection . . . . The first way in which a claim may be made narrower is by adding a limitation to it in the form of an additional element.

We discern no basis for reading claim 6 as countermanding the claim construction of the magistrate judge that claim 1 "[does not] preclude movement or manipulation after lodging."

We confirm the district court's claim construction, with the modification or clarification that claim 1 neither excludes nor requires the step of pulling on the suture after it is inserted. However, we also confirm the claim construction that the '557 claims do not cover a device whereby the suture must necessarily be manipulated and moved through the bone in order to open the anchor and spread the legs, for S&N is estopped by the prosecution history from covering a device that must be manipulated and opened in order to fix it in the bone. However, a device that resiles after insertion into the bone may be manipulated provided that "manipulation beyond pressing [is not] necessary in order to

secure the member in the hole."

## II

The signal that additional steps may be performed in carrying out a claimed method is the word "comprising." See Vivid Technologies, Inc. v. American Science & Engineering, Inc., 200 F.3d 795, 811, 53 USPQ2d 1289, 1301 (Fed. Cir. 1999) (the signal "comprising" is "generally understood to signify that the claims do not exclude the presence in the accused apparatus or method of factors in addition to those explicitly recited"); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1271, 229 USPQ 805, 812 (Fed. Cir. 1986) (stating "the general proposition that an accused method does not avoid literally infringing a method claim having the transitional phrase 'which comprises' (or 'comprising') simply because it employs *additional* steps"). Our esteemed colleague in dissent criticizes use of the signal "comprising," calling it a "weasel word" to somehow avoid precision in claiming. This signal nonetheless appears in the vast majority of patent claims, for it implements the principle that claims are intended to provide a concise statement of the claimed invention as distinguished from what has gone before; a claim is not a handbook for practice of the invention. Dr. Hayhurst's testimony and instructions that any prudent surgeon would test the anchor to assure that it is lodged beneath the cortical layer was not included in any claim. Nor was it required to be claimed. It is neither a "shortcoming" nor a "weasel" to use "comprising" to recognize that inventions may be practiced with steps in addition to those listed in the claims.

A claim is not defective when it states fewer than all of the steps that may be performed in practice of an invention. See, e.g., Moleculon Research Corp., 793 F.2d at 1271, 229 USPQ at 812 (method as practiced can include steps in addition to those stated in the claim). Infringement arises when all of the steps of a claimed method are

performed, whether or not the infringer also performs additional steps. See, e.g., Vivid Technologies, 200 F.3d at 811, 53 USPQ2d at 1301 (inclusion of steps in addition to those stated in the claim does not avoid infringement); Stiftung v. Renishaw PLC, 945 F.2d 1173, 1178, 20 USPQ2d 1094, 1098 (Fed. Cir. 1991) (claim using "comprising" reads on devices which add additional elements). This court did not hold in Maxwell v. J. Baker, Inc., 86 F.3d 1098, 39 USPQ2d 1001 (Fed. Cir. 1996) that unless all disclosed procedures are included in the claim, the patentee has "dedicated to the public" not only the unclaimed procedures but the entire claimed process. Our colleague in dissent, finding the disputed fact that Ethicon's method "indisputably requires the 'tensioning' step," proposes that Maxwell requires that by not including the tensioning step in the claims, S&N dedicated to the public any procedure in which that step is included. However, Maxwell does not treat such a situation. The issue in Maxwell was whether equivalent subject matter that was disclosed in the specification but not claimed can be reached under the doctrine of equivalents.<sup>2</sup> There was no issue in Maxwell of literal infringement when every step of the claimed method is in fact practiced by the accused infringer. In Maxwell the accused equivalent subject matter was disclosed in the patent but was plainly outside the scope of the claims. Such a situation is not here presented.

### III

The '557 invention is directed to an anchor with resilient legs that open and resile after the anchor is pushed into the cancellous bone, lodging the anchor against the cortical layer. Although Ethicon states that the legs of its anchor do not work in this way, there was

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<sup>2</sup> This question is being considered by this court *en banc*, in Johnson & Johnston Associates Inc. v. R.E. Service Co. See 238 F.3d 1347 (Fed. Cir. 2001) (Order directing supplemental briefing on questions of "Whether and under what circumstances a patentee can rely upon the doctrine of equivalents with respect to unclaimed subject matter disclosed in the specification.")

evidence before the district court supporting S&N's statement that the Ethicon legs "are made of a highly resilient alloy called 'Nitinol,' which will spring back to its relaxed position automatically after being compressed," and that "No action of the surgeon is required to open the arcs." Brief at 32-33.

S&N points out that Ethicon's own product literature and patent do not require a "tensioning" step to move the anchor after insertion, instead stating that the anchor has no tendency to move when inserted. Indeed, the district court agreed with S&N, and ruled: "In sum, it is undisputed that the arcs of the accused suture anchors substantially return to their relaxed state upon being pressed into cancellous bone and can not be removed." We can not reconcile this ruling with the district court's apparent conclusion that the surgeon's pull on the Ethicon anchor is necessary to spread the legs and lodge the anchor. Ethicon's position that its anchor is not "lodged" until after it has been moved and manipulated within the bone was disputed, and was material to the summary judgment. On the record before the district court this disputed material fact could not be resolved adversely to S&N.

In addition to the issues of literal infringement, S&N argues that even on the district court's unmodified claim construction infringement would lie under the doctrine of equivalents. The questions of infringement are factual issues, and require determination in view of our modified claim construction.

The summary judgment is vacated, and the case is remanded for further proceedings in accordance with the claim construction as modified herein.

VACATED AND REMANDED

# United States Court of Appeals for the Federal Circuit

00-1160

SMITH & NEPHEW, INC. and JOHN O. HAYHURST, M.D.,

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v.

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Defendant-Appellee.

MICHEL, Circuit Judge, dissenting.

I have a much different view of this case. Because none of the seven claims here even remotely suggests that one need apply “tension” to the suture in order to make the legs of the claimed anchor member dig into the cancellous bone tissue and because our precedents counsel against using the term “comprising” to include disclosed but unclaimed subject matter, the district court correctly concluded that, as a matter of law, the ’557 patent does not cover Ethicon’s accused method, which indisputably requires this “tensioning” step. Indeed, one of the asserted claims in this case expressly disclaims the need for “any manipulation of the [anchor] member other than inserting the member into the bone.”

And indeed, the inventor himself agreed (whether he realized it or not) with this construction, testifying that his claimed method for making the anchor member ready for tissue attachment does not require any post-insertion step -- like applying tension to the suture -- after the surgeon had inserted the anchor member into the bone hole. The majority cannot reasonably minimize this “tensioning” step as extraneous; as indicated, by disclosing the step in the specification but by failing to include it in the claims, Smith & Nephew simply dedicated that step to the public. A member of the public (Ethicon) so used it. S&N cannot now recover what it had previously dedicated. I must dissent.

I.

In Maxwell v. J. Baker, Inc., “we reiterated the well-established rule that ‘subject matter disclosed but not claimed in a patent application is dedicated to the public.’” 86 F.3d 1098, 1106-07 (Fed. Cir. 1996) (quoting Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562-63 (Fed. Cir. 1991) and citing Miller v. Bridgeport Brass Co., 104 U.S. 350, 352 (1881)). This rule, we held, prohibited both a finding of literal infringement and of infringement under the doctrine of equivalents because, otherwise, an applicant could “present a broad disclosure in the specification of the application and file narrow claims,” thereby “avoiding examination of broader claims that the applicant could have filed consistent with the specification.” Id. at 1107 (citing Genentech, Inc. v. Wellcome Found. Ltd., 29 F.3d 1555, 1564 (Fed. Cir. 1994); International Visual Corp. v. Crown Metal Mfg. Co., 991 F.2d 768, 775 (Fed. Cir. 1993)). In addition, the rule comports with (among other principles) the statutory requirement of distinctly claiming the “subject matter which the applicant regards as his invention.” Id. (quoting 35 U.S.C. § 112).

Applying the dedication-to-the-public rule, we determined that because the patentee there had merely disclosed, but not claimed, an “alternative” for having a shoe’s “fastening tabs . . . stitched into the lining seam of the shoes,” the patentee had thereby deprived the Patent and Trademark Office from considering the patentability of that alternative. Id. at 1108. Further, we reasoned that a person of ordinary skill in the “shoe industry” would conclude that the failure to claim the disclosed “alternate shoe attachment systems” meant the patentee there had simply “dedicated the use of such systems to the public.” Id. Accordingly, we held that no complaint for literal infringement or for infringement by equivalents could lie. Id.

So too does the rule apply here. Like Ethicon’s accused method and device, the ’557 patent’s “Summary of the Invention” and its “Description of Preferred Embodiments”

both disclose embodiments that need to have “tension applied to the [anchor member’s] suture” in order to have the “ends of the [anchor member’s] legs dig into the bone and resist removal of the anchor member from the hole” drilled into the bone. (See, e.g., J.A. 150, Col. 3, Lines 1-6; see also Col. 9, Lines 45-49 (“With the outer edges of the legs bearing upon the bone, any tension applied to the suture causes the sharp edges . . . to dig into the bone to secure the anchor member within the hole.”).) But nowhere do any of the claims themselves recite a step about “applying tension to the suture” in order to have the claimed anchor member’s legs dig into the bone. (See generally J.A. 154, Col. 11 and Col. 12.)

To the contrary, one of the asserted claims expressly disclaims any step of applying tension to expand the anchor’s legs. Claim 6 -- a claim directed at applying the claimed method when, as here, one needs to set the member inside the bone -- claims the step of “inserting the [anchor] member into the [bone] hole . . . such that the member lodges within the hole in the absence of any manipulation of the member other than inserting the member into the hole.” (See J.A. 154, Col. 12, Lines 17-20) (emphasis added). In other words, one practicing the invention need only insert the anchor into the hole to have the anchor legs automatically “resile” and dig into the bone. (See id.)

The other three independent claims require more or less, stating (among other things) the steps for “attaching tissue to the suture so that the tissue is secured against the bone” (claim 1), “deforming the [anchor] member in a manner such that the member resiles [expands] against the portion of the bone” (claim 2) and “lodging the [anchor] member within the hole by pressing the member with attached suture into the hole” (claim 3). But “more” in this case cannot mean (under the claim differentiation doctrine) that the claims engulf an entirely new and different step, the step of applying “tension” to the suture, see Kraft Foods v. International Trading Co., 203 F.3d 1362, 1368 (Fed. Cir. 2000) (“[C]laim

differentiation cannot broaden claims beyond their correct scope”) (citations omitted); to find otherwise would mean we could read any disclosed but unclaimed alternative into a claim, in derogation of our “well-established rule” about public dedications. Worse, it would mean that (as more fully discussed below) a court could return to the applicant what the applicant had also expressly disclaimed, both during prosecution and even later in litigation. Courts should merely give effect to the words used in a claim, not re-write or even resurrect them.

The majority states that the '557 patent instructs “[s]urgeons . . . to tug on the suture after the anchor is pressed into the bone, to assure that it is securely seated.” But its opinion does not identify whether that instruction appears in the claims, the written description or any other portion of the specification. In any event, that instruction certainly does not appear in the language of the claims, the most critical portion of the patent. And when the language about tugging on or applying pressure to the suture expressly appears in the written description, it does so for the purpose of asserting that a “tug” will cause or help cause the anchor to lodge itself within the bone, i.e., that tug does more than simply “assure” that the anchor is lodged within the bone. (See, e.g., J.A. 150, Col. 3, Lines 4-6 (“Whenever tension is applied to the suture, the ends of the legs dig into the bone . . . .”) (emphasis added); J.A. 153, Col. 9, Lines 54-60 (“As a result, tension in the suture (in conjunction with the intrinsic resilient force of the anchor member 80 that forces the leg edges 87 apart) tends to lodge the edges 87 of the anchor-member legs beneath the cortical layer 97, rendering the anchor member substantially irremovable from this hole 100.”)) (emphasis added).

As even the disclosed-but-unclaimed language would have it, then, S&N’s device and process would indeed “require a surgeon’s tug to assure that the anchor is set within the cancellous bone,” contrary to my esteemed colleagues’ interpretation. Simply put,

nothing in the claims or specification suggests that a surgeon should tug on or apply tension to the suture solely to “assure” or “confirm” that the anchor has become lodged in the bone. But again, the claims say nothing of “tensioning” for any reason, leaving it to the resiliency of the legs alone to complete the necessary “lodging” step.

## II.

The majority also indicates that I have misapplied the public-dedication analysis and misread Maxwell, though a review of that decision shows (contrary to my colleagues’ assertion) that Maxwell, its predecessors and its progeny apply with equal force to situations involving infringement by equivalents and literal infringement. E.g., 86 F.3d at 1107 (“We have frequently applied this [public-dedication] rule to prohibit a finding of literal infringement when an accused infringer practices disclosed but unclaimed subject matter.”) (citing Envtl. Instruments, Inc. v. Sutron Corp., 877 F.2d 1561, 1564 (Fed. Cir. 1989)). Further, the majority uses the term “comprising” to mean that the ’557 patent requires not only the steps of lodging the member anchor and attaching tissue to the suture, but also the unclaimed step of applying “tension” to the suture.

True, we have recognized that “comprising” generally signifies that the “claims do not exclude the presence in the accused apparatus or method of factors in addition to those explicitly recited.” See Vivid Tech., Inc. v. Am. Sci. & Eng’g, Inc., 200 F.3d 795, 811 (Fed. Cir. 1999). But as Ethicon correctly asserts, we have also held that an applicant cannot use this open-ended term to recapture what he had otherwise given away. See, e.g., Spectrum Int’l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1380 (Fed. Cir. 1998) (“Neither may the term ‘comprising’ alter the scope of the merger element in the claim at issue here. ‘Comprising’ is not a weasel word with which to abrogate claim limitations.”); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1271 (Fed. Cir. 1986) (rejecting as “far too

broad” the argument that “comprising” opened the claims to additional steps and additional limitations not contained in the accused method).

And in this case, the majority is using this “weasel word,” see Spectrum International, 164 F.3d at 1380, to obliterate our “well-established rule,” see Maxwell, supra, against giving effect to disclosed but unclaimed subject matter. Thus, the majority implies that applicants may now avoid the Maxwell bar by simply including in every claim the term “comprising,” as if that term alone can magically shore up whatever shortcoming (intentional or not) the claim had before it became the subject of litigation. I believe that our jurisprudence and indeed the statutory requirement for “distinctly claiming” one’s invention require more than this simple flick of the “comprising” switch.

### III.

The majority, in my view, also cannot reasonably equate the ’557 patent’s “lodge” or “lodging” claim limitation with the “tensioning” needed to have Ethicon’s accused device kick-out its legs into the bone. The specification indicates that these are separate steps, ones that follow each other. But again, only the “Summary of the Invention” and the “Description of Preferred Embodiments” reference an embodiment that recites the need to have “tension applied to the suture [to] cause[ ] the sharp edges [of the anchor member] to dig into the bone to secure the anchor member within the hole.” (E.g., J.A. 153, Col. 9, Lines 46-49.)

As discussed above, the claims omit this step. Claims 1-3 state only that one must “lodg[e] the [anchor] member in the hole by pressing the member with attached suture into the hole . . . .” (See J.A. 154, Col. 11, Lines 7-8, 15-16 and Col. 12, Lines 1-2.) Claim 2, moreover, recites the method by which the anchor member does dig into the bone: By “deforming the member in a manner such that the member resiles against the portion of the bone that defines the hole.” (See J.A. 154, Col. 11, Lines 18-20) (emphasis added).

Read in context, this claim can only mean what the specification repeatedly indicates will occur when the anchor member's "resilient material" (J.A. 152, Col. 8, Line 58) or "intrinsic resilience of the anchor member" (J.A. 153, Col. 9, Lines 21-22; J.A. 153, Col. 10, Lines 51-52) is allowed to "relax" and assume its natural shape: the "resilient" anchor automatically kicks out its legs or "resiles," causing the legs to dig into the bone and thereby allowing for the next step of the claimed method (the attaching of tissue to the suture so as to secure the tissue against the bone) to go forward. (See, e.g., J.A. 153, Col. 10, Lines 50-54.)

Claim 6, as noted earlier, does not help Plaintiff-Appellant S&N, not only because S&N cannot rely on a narrower claim to incorporate an entirely new "tensioning" step; but also because that claim, too, merely confirms that the patent failed to claim this step. The claim makes clear that the anchor member will become "lodge[d] within the hole in the absence of any manipulation of the member other than inserting the member into the hole." (See J.A. 154, Col. 12, Lines 18-20.) And again, this can only mean that the anchor member will automatically lodge into the bone and become ready for the subsequent attaching of the tissue, without any intermediate step of applying tension to the suture. This is not an insignificant element of the claimed invention. As the specification itself states, this claimed albeit "simple mechanism for [automatically] anchoring the anchor member in bone . . . [provides] a means for reattaching tissue to the bone to promote healing." (See J.A. 153, Col. 9, Lines 25-28.)

The extrinsic evidence confirms this reading of the '557 patent. The inventor, Dr. Hayhurst, admitted at his deposition that one would not be practicing claims 1, 2, 3 or 6 of the '557 patent if one had to perform any "further manipulation of the anchor member other than merely pressing it into the hole in order to lodge it within the hole." (See J.A. 6443-44.) And at the Markman hearing, Dr. Hayhurst conceded that his "device" was "ready to

have tissue attached to it,” i.e., ready to have the last stage of the claimed method performed, “without first pulling back on the suture.” (See J.A. 7438) (emphasis added).

Stated differently, the '557 patent avoids the need to have tension applied to the suture or anchor member in order to have the anchor's legs resile, dig into and thereby lodge themselves within the bone; the resilient nature of the legs themselves causes them to automatically kick-out and thereby lodge themselves within the bone once the surgeon has “press[ed] [them] into the hole.” (See J.A. 6443-55; J.A. 7438.) By relying on a novel standard of “reasonable practice of the method taught in the patent” and by therefore assigning the claims a contrary construction, the majority has (among other things) added a step that Dr. Hayhurst himself eschewed.

#### IV.

Finally, no genuine issue of material fact exists about whether Ethicon's accused method infringes the correctly construed '557 patent. Courts should grant summary judgment, of course, when no genuine issue of material fact remains and the movant warrants judgment as a matter of law. Vehicular Tech. Corp. v. Titan Wheel Int'l Inc., 212 F.3d 1377, 1381 (Fed. Cir. 2000). The non-moving party, moreover, cannot defeat summary judgment simply by insisting that a genuine dispute exists or even by proffering some evidence; in any case, the non-moving party (provided that this party bears the ultimate burden of proof, as with S&N here) must produce evidence that a reasonable jury could find sufficient to prove, e.g., that the accused device contains all the limitations set forth in the patent claims. See Zodiac Pool Care, Inc. v. Hoffinger Indus., Inc., 206 F.3d 1408, 1414-15 (Fed. Cir. 2000) (affirming summary judgment on claim alleging literal infringement when no reasonable juror could find, based on the evidence presented, that the accused devices contained all the limitations set forth in the claimed invention); see also Vehicular Tech. Corp., 212 F.3d at 1382.

The record here establishes beyond reason that, unlike the claimed invention, the accused method does require the additional step of tensioning the suture in order to fix the anchor within the bone hole and to thereby make it “ready” for the attachment of tissue. S&N has not identified any evidence that could reasonably rebut the packaging instructions that Ethicon included with every anchor, instructions that direct surgeons to pull back on (i.e., apply “tension” to) the anchor in order to ready it for tissue attachment. (S&N’s product instructions, mentioned by the majority, do not factor into either the claims construction or infringement analysis. We examine the former using primarily the intrinsic evidence -- the claims, the specification and, if in evidence, the prosecution history; and in the rare case we will resort to extrinsic evidence. We examine the latter by analyzing whether the accused device contains all the limitations claimed by the patent at issue.) Nor did S&N offer any evidence that could rebut the expert testing results showing that Ethicon’s anchor would move outwardly from the bone hole absent a tensioning step.

Equally significant, S&N offered no evidence that could reasonably rebut the evidence showing that movement of an unsecured anchor would result in failed surgeries. The advertising materials that S&N did offer still do nothing to change this conclusion. For one thing, Ethicon itself did not draft these materials, so they do not even necessarily constitute a party-opponent admission, let alone a damaging admission. And these advertisements say nothing, one way or the other, about having to apply tension to Ethicon’s suture. No reasonable juror would take those advertisements and somehow convert their silence into an admission that contradicts the express instructions that Ethicon itself drafted. Nor should we.

And last, I find inapplicable our rule that an accused device will infringe the claimed invention so long as that device contains all the limitations claimed in the patent, even if the device merely adds more steps or features. As discussed, the ’557 patent emphasizes

the importance of having resilient legs, since that resiliency enables the claimed invention to lodge itself within the bone as soon as the anchor enters the soft, cancellous layer. But as the evidence shows, the accused device does not have legs that automatically kick-out or resile and thereby lodge the anchor within the bone; so rather than merely adding a step or feature to the invention claimed by the '557 patent, the accused device simply does not contain that step or feature at all, i.e., it does not contain all the elements claimed by the patent. See, e.g., Vehicular Tech. Corp. v. Titan Wheel Int'l, Inc., 141 F.3d 1084, 1089 (Fed. Cir. 1998) (infringement exists only if all limitations of the claim appear, either literally or by equivalents, in the accused product or process).

The majority, however, brushes aside any detailed examination of the evidence actually offered by the parties. Merely disputing a material fact, or even pointing to Ethicon's advertising materials, should not defeat summary judgment when no reasonable juror could examine that evidence and find in S&N's favor. Because of today's decision, I fear that we have inadvertently and improperly raised the bar for summary judgment in actions alleging patent infringement.

V.

To summarize, the specification (other than the claims themselves) does disclose the need to have "tension" applied to the claimed suture in order to make the claimed anchor member ready for the attachment of tissue to the bone. But nowhere do any of these claims actually recite this step, meaning the patentee has dedicated it to the public. Ethicon, therefore, could reasonably conclude as such and could lawfully use that step in its accused method.

The use of the term "comprising" should not change this reading of the patent. Our precedents have cautioned that while "comprising" is an open-ended term, it is not a tool for recapturing what the applicant had otherwise surrendered. In this case, as noted, S&N

did just that, dedicating to the public the step of applying tension to the anchor member's suture. Nor should we allow a "weasel word" like "comprising" to nullify the public-dedication rule, well settled in our precedent.

Further, the limitation "lodged" or "lodging" as used in the various claims excludes the disclosed-but-unclaimed tensioning step. The specification repeatedly refers to the "resilient" nature of the claimed anchor's legs and the claims themselves indicate that these legs will "resile" or expand automatically simply because of their resiliency, i.e., no additional tensioning step is needed after all. The testimony by the inventor Dr. Hayhurst himself confirms that, indeed, a surgeon or other person practicing the '557 patent does not need to apply tension to the suture in order to make the anchor's legs dig into the bone.

Last, S&N has failed to identify any evidence that would lead a reasonable juror to conclude that Ethicon's accused method similarly or literally requires that its accused anchor also automatically kick-out the legs after entering the hole in the bone. Again, Ethicon produced the instructions it included with every package of anchors and these instructions directed surgeons to apply tension to the anchor's suture. In addition, Ethicon produced expert testing results showing that a surgeon needed to apply this tension in order to set the anchor before attaching the tissue; otherwise, the unrebutted evidence shows, unsuccessful surgeries could result and patients would not heal.

The only evidence that S&N did offer in rebuttal -- advertisements drafted by a third party -- could not lead a reasonable juror to reach a different outcome. Ethicon itself did not draft these advertisements and nothing in the advertisements even contradicts what Ethicon's instructions and expert testing results established beyond genuine dispute.

I respectfully dissent.

