

# United States Court of Appeals for the Federal Circuit

05-1103

WILSON SPORTING GOODS COMPANY,

Plaintiff-Appellant,

v.

HILLERICH & BRADSBY CO.,

Defendant-Appellee.

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Appealed from: United States District Court for the Northern District of Illinois

Judge Ruben Castillo

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DECIDED: March 23, 2006

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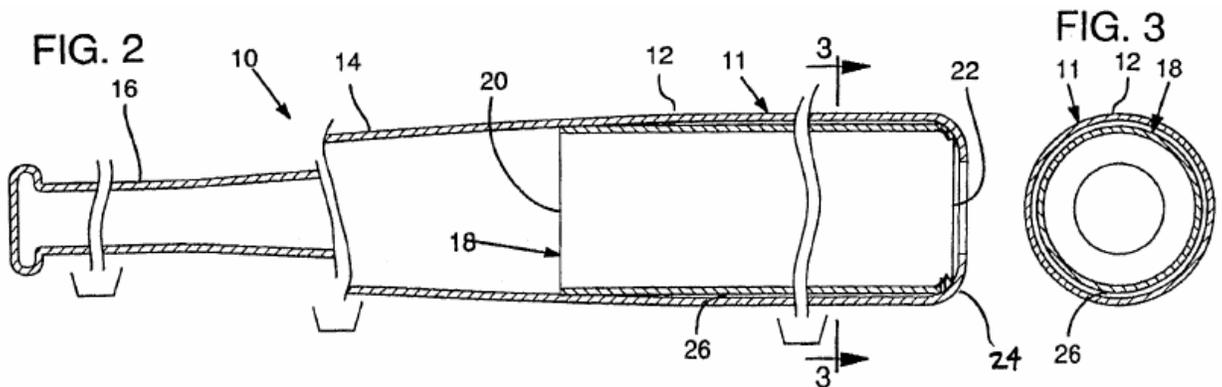
Before LOURIE, RADER, and BRYSON, Circuit Judge.

RADER, Circuit Judge.

In a stipulated Rule 54 judgment, the United States District Court for the Northern District of Illinois dismissed with prejudice Wilson's contentions that softball and baseball bats sold by Hillerich & Bradsby (H & B) infringed claims 1, 15, and 18 of U.S. Patent No. 5,415,398 (granted May 16, 1995) (the '398 patent). In this judgment, the court also granted H & B's declaratory judgment action that its bats do not infringe the '398 patent, but dismissed H & B's cause of action for declaratory judgment of invalidity of the '398 patent, and awarded costs, exclusive of attorney fees, to H & B. Wilson Sporting Goods Co. v. Hillerich & Bradsby Co., No. 00-CV-6517 (N.D. Ill. Oct. 27, 2004)( Final Judgment Order). Wilson appeals the court's construction of claim terms in claims 1, 15, and 18. Because the district court did not correctly construe these claims, this court vacates and remands.

I.

The '398 patent claims a softball bat that incorporates interior structural members to improve its impact response. See '398 patent, col. 1, ll. 8-11. The primary feature of the invention is an insert within the body of the bat that improves the bat's hitting properties. Figures 2 and 3 of the '398 patent depict one embodiment of the disclosed invention:



As depicted, element 26 is “a narrow, uniform gap . . . between the insert 18 and the inner wall of the impact portion 12. The gap extends uniformly around the insert . . . and along the length of the insert between the first and second ends 20 and 22 thereof.” '398 patent, col. 2, l. 66 – col. 3, l. 2. The insert is separated from the tubular frame by a gap except at its ends, where the insert and the frame were adjoined. Upon impact with a ball, the outer wall 11 and the insert 18 jointly act as a spring, which elastically deflects and stores energy from the impact with the ball. As the bat and insert rebound, energy from the initial deflection returns to the ball. According to the specification, the inventive bat transfers power from the bat to the ball better than competing bats because of the “leaf-spring” action of the double walls. Distribution of the impact force between the outer wall and the insert also permits use of a thinner outer wall, thus lightening the bat. See '398 patent, col. 3, ll. 16-65.

Because the disputed claims contain significant differences, this opinion quotes all of those claims. Claim 1 of the '398 patent reads as follows:

1. A bat, comprising:

a hollow tubular bat frame having a circular cross-section; and

an insert positioned within the frame, the insert having a circular cross-section, the insert having first and second ends adjoining the tubular frame, the insert being separated from the tubular frame by a gap forming at least part of an annular shape along a central portion between said first and second ends, the frame elastically deflectable across the gap to operably engage the insert along a portion of the insert between the insert first and second ends.

15. In a hollow bat having a small diameter handle portion and a large-diameter impact portion, an improvement comprising an internal structure insert defining an annular gap with an inside wall of the impact portion of the bat and the impact portion elastically deflectable to close a portion of the annular gap and operably engage the insert.

18. A bat, comprising:

a hollow tubular bat frame having a small-diameter handle portion and a large-diameter impact portion having a circular cross-section with an inner and outer diameter;

at least one insert having a substantially circular cross-section with an outer diameter less than the inner diameter of the frame impact portion, the insert being held within the impact portion; and

the impact portion being inwardly elastically deflectable such to establish a tight interference fit between the insert and the impact portion.

(emphases added to disputed terms). The claims differ in that the “gap” forms “at least part of an annular shape” in claim 1; the “gap” is “annular” in claim 15; and the “gap” does not appear at all in claim 18. Although “gap” does not appear in claim 18, the claim term “a tight interference fit” implies some sort of space between the frame and the insert. Further, claim 1 describes the insert as having “a circular cross-section;” as “defining an annular gap” in claim 15, and as having a “substantially circular cross-section” in claim 18.

In its Markman hearing, the trial court construed, inter alia, the terms “gap” and “insert.” The trial court determined that “gap” in all claims meant “a single continuous space or void between the interior of the frame and the exterior of the insert great enough to allow for deflection across the gap.” Wilson Sporting Goods Co. v. Hillerich & Bradsby Co., No. 00-CV-6517, slip op. at 10 (N.D. Ill. Aug. 7, 2003) (Order), 10. That definition precluded any contact between the bat frame and the insert at any point along the length of the insert before impact. The trial court construed “insert” in all claims to mean a “rigid, circular, hollow tube having an outer diameter less than the inner diameter of the tubular frame impact portion.” Order, at 12.

Based on those claim constructions, the parties dispute the meaning of both terms. Specifically, the parties dispute the application of a single definition of “gap” to claims 1 and 18, and the preclusion of any contact before impact in the definition of “gap.” On the term “insert,” the parties similarly dispute the application of the trial court’s definition to all contested claims, and the inclusion of “rigid” and “hollow tube” within that definition.

## II.

The United States Court of Appeals for the Federal Circuit reviews procedural matters that are not unique to patent issues under the law of the particular regional circuit court where appeals from the district court would normally lie. Panduit Corp. v. All States Plastic Mfg. Co., 744 F.2d 1564, 1575 (Fed. Cir. 1984), overruled on other grounds, Richardson-Merrell, Inc. v. Koller, 472 U.S. 424, 432 (1985). When parties have stipulated to a judgment, the United States Court of Appeals for the Seventh Circuit interprets the stipulation to mean that the facts are not in dispute. Hess v.

Hartford Life & Acc. Ins. Co., 274 F.3d 456, 461 (7th Cir. 2001); cf. Saab Cars USA, Inc. v. United States, 434, F.3d 1356, 1371 (Fed. Cir. 2005) (“A trial court’s decision based upon stipulated facts resembles, in significant respects, a decision on the administrative record, which we have recently concluded is not akin to summary judgment.”). The Seventh Circuit treats a stipulated judgment as “more akin to a bench trial than to a summary judgment ruling.” Hess, 274 F.3d at 661 (citing May v. Evansville-Vanderburgh Sch. Corp., 787 F.2d 1105, 1115-16 (7th Cir. 1986) (where parties agree to a judgment on stipulated facts, “[i]n effect the judge is asked to decide the case as if there had been a bench trial in which the evidence was the depositions and other materials gathered in pretrial discovery”). Thus, as the Seventh Circuit would do after a bench trial, this court reviews the district court’s legal conclusions de novo and any factual inferences for clear error. Id. (citing Johnson v. West, 218 F.3d 725, 729 (7th Cir. 2000)).

Furthermore, patent infringement analysis involves two steps: claim construction, and application of the construed claim to the accused process or product. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), aff’d, 517 U.S. 370 (1996). This court reviews the first step, claim construction, without deference. See Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). The second step, application of the claim to the accused product to determine infringement, is a question of fact. See Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279, 1282 (Fed. Cir. 1986). In the context of summary judgment, this court reviews de novo the district court’s determination that

there is no genuine issue as to any material fact regarding infringement. MEMC Elec. Materials v. Mitsubishi Materials Silicon Corp., 420 F.3d 1369, 1373 (Fed. Cir. 2005).

With limited statutory exceptions that do not apply to this case, see 28 U.S.C. § 1292(c) and (d), this court reviews only final judgments. 28 U.S.C. § 1295 (2000). A final judgment, by definition, ends the litigation on the merits. Catlin v. United States, 324 U.S. 229, 233 (1945). Patent litigation is the patentee's remedy for infringement. 35 U.S.C. § 281. Thus, final judgment in a patent case will usually produce a judgment of infringement or non-infringement. This court reviews claim construction only as necessary to reach that final judgment on an infringement cause of action. Therefore, in reviewing claim construction in the context of infringement, the legal function of giving meaning to claim terms always takes place in the context of a specific accused infringing device or process. While a trial court should certainly not prejudge the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process, knowledge of that product or process provides meaningful context for the first step of the infringement analysis, claim construction. See Multiform Dessicants, Inc. v. Medzan, Ltd., 133 F.3d 1473, 1476-78 (Fed. Cir. 1998) (recognizing that infringement may be resolved with the step of claim construction as district court defined "degradable" claim term in light of the mode of action of the accused device); Pall Corp. v. HemaSure Inc., 181 F.3d 1305, 1308 (Fed. Cir. 1999) ("Although the construction of the claim is independent of the device charged with infringement, it is convenient for the court to concentrate on those aspects of the claim whose relation to the accused device is in dispute."); Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1580 (Fed. Cir. 1991) ("Of course the particular accused product

(or process) is kept in mind, for it is efficient to focus on the construction of only the disputed elements or limitations of the claims.”); SRI Int’l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1118 (Fed. Cir. 1985) (while a claim is not to be construed in light of the accused device, in an infringement case, it must inevitably be construed in context of the accused device).

In this case, despite entry of a final judgment, neither the trial court nor the parties supplied this court with any information about the accused products. Thus, this record affords this court no opportunity to compare the accused products to the asserted claims. Accordingly, this court cannot assess the accuracy of any infringement or validity determination. Furthermore, this sparse record lacks the complete context for accurate claim construction. Thus, without a record of the accused products, this appeal assumes many attributes of a proceeding seeking an advisory opinion on the scope of the '398 patent. This court has noted the problems of an appeal with such a limited record. Bayer AG. v. Biovail Corp., 279 F.3d 1340, 1349 (Fed. Cir. 2002) (holding that it was premature for this court to engage in its own claim construction where the district court had not performed a comprehensive claim construction based on a complete record); CVI/Beta Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1160 n.7 (Fed. Cir. 1997) (reaching a different claim construction with respect to the same patent that had been considered in a prior decision of the court involving a preliminary injunction motion).

Despite the impediments to a full review, i.e., the sparse record, this court perceives some flaws in the trial court’s claim construction that led to the entry of the stipulated judgment of non-infringement. Accordingly, rather than merely remand for

development of a complete record, this court offers some analysis to guide the trial court upon remand.

In analyzing the term “gap,” the trial court noted that, according to the claim language, the insert is “separated from the tubular frame by a gap” except at its ends, where the insert and the frame were adjoined. The court found no indication that the inventor had given the word “separate” other than its ordinary meaning. In that connection, the trial court consulted Webster’s II New Riverside University Dictionary to determine that “separate” meant “set apart from others” and “existing by itself.” The dictionary reference also included “void,” which means an “open space or a break in continuity.” The trial court considered this definition synonymous with “gap.” The court further noted that the frame must be “elastically deflectable across the gap to operably engage the insert,” which would not be possible if the frame and insert were initially engaged.

The various claims in this patent, however, contain distinctions that cast doubt on the trial court’s interpretation of “gap” and its conclusion that all of the disputed claims require a “single continuous space or void.” For example, claim 1 features the gap in at least part of an annular shape; claim 15 makes the gap itself annular; claim 18 has no annular requirement. Under this court’s case law, the same terms appearing in different claims in the same patent—e.g. “gap” in claims 1 and 15—should have the same meaning “unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims.” Fin Control Sys. Pty, Ltd. v. OAM, Inc., 265 F.3d 1311, 1318 (Fed. Cir. 2001); Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (“[C]laim terms are normally used consistently

throughout the patent.”). In this case, the claims use the term “gap,” but then modify it differently to suggest differences in the geometry of the “gap” in the various claims.

Taking into account the term “annular,” “gap” takes on a meaning different from the trial court’s construction. Specifically, the modifiers to “gap,” such as “annular,” produce significant differences in the geometries in each defining claim. These modifiers inform the nature of the gap in each claim and define differently the cross-section of the claimed insert. ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“[T]he context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.”).

This court notes that the adjective “annular” appears only within the claims, not in the patent specification. Nothing in the specification, including the claims, indicates explicitly or implicitly, that the inventor intended to impart a novel meaning to “annular.” The record also contains no evidence that “annular” has a peculiar meaning in the field of art encompassed by the ’398 patent. This court concludes, therefore, that the ordinary and customary meaning attributed to this term by those of ordinary skill in this art at the time of invention “involves little more than the application of [its] widely accepted meaning.” Phillips, 415 F.3d at 1314.

This court has previously recognized that the ordinary and customary meaning of “annular” is “of or relating to an area formed by two concentric circular or curved regions.” Int’l Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1372-73 (Fed. Cir. 2004) (citing Webster’s Third New International Dictionary 88 (1966)). Giving “annular” its proper place in the construction of the claims informs the interpretation of “gap.” In claim 1, both the frame and the insert unequivocally have “a circular cross-section,” but

the gap between them need only form “at least part of an annular shape along a central portion between” the ends. The claim language thus permits non-annularity somewhere along the central portion. Annularity also requires “roughly parallel sides.” An embodiment without the annular requirement, therefore, need not have even “roughly” parallel sides. Thus, a claim without the “annular” requirement or with only a partial “annular” requirement could have a gap characterized by intersection of part of the cross-section between insert and frame. In other words, claims 1 and 18 do not require concentricity of the circular insert and frame. Moreover, those claims do not foreclose some contact between the insert and frame.

In claim 18, neither “gap” nor “annular” appear. Instead, the insert has “a substantially circular cross-section” “within the impact portion” of the frame. This impact portion is “inwardly elastically deflectable” to allow contact (“a tight interference fit”) between the insert and the impact portion. The term “substantial” implies “approximate,” rather than “perfect.” Liquid Dynamics Corp. v. Vaughan Co., Inc., 355 F.3d 1361, 1368 (Fed. Cir. 2004). Therefore, in contrast to the insert of claim 1, the insert in this claim need not be perfectly circular. Rather the claim requires only space between the frame and the insert to allow for contact when the impact portion is elastically deflected. Because the bat hits the ball at only a small point of impact, not extending over the entire circumference of the frame, claim 18 also does not foreclose the possibility that contact between the frame and insert occurs, before impact, at some point other than that at which impact occurs. As a result of these considerations, this court defines “gap” for the purposes of claims 1 and 18 of the ’398 patent as “a

separation.” The separation may be localized, so that a cross-section of the bat in the impact region need not possess circular symmetry.

The trial court also interpreted the insert as hollow. Only claim 15, however, requires a hollow insert, and then, only implicitly. Claim 15 calls for “a hollow bat.” Because the insert is part of the internal structure of the bat, the insert must be hollow for the bat itself to be hollow. The preferred embodiment shown in the specification has a hollow insert to minimize “the machining and cold working problems associated with titanium.” ’398 patent, col 4, l. 68 – col. 5, l. 2. This court, however, declines to read a limitation from the written description into the claims. SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1340 (Fed. Cir. 2001). Here, the context in which “bat” is used in claim 15 is instructive as to the nature of the insert required for that claim. However, “insert” can be defined broadly enough to encompass both a hollow and a solid insert, and yet have the same meaning in all claims.

The term “rigid” appears in connection with “insert” only once. The term appears that single time in uncontested claim 3, “wherein the insert is rigid.” This single use of the term “rigid” does not, however, import a “rigid” limitation into all other claims. Rather it implies that the term “insert,” when used elsewhere in the patent, does not inherently carry a “rigid” limitation. See Phillips, 415 F.3d at 1314 (“The claim in this case refers to ‘steel baffles,’ which strongly implies that the term ‘baffles’ does not inherently mean objects made of steel.”)

Rigidity, as employed in this patent, is a measure of resistance to shearing. ’398 patent, col. 3, ll. 33-35 (“the insert undergoes substantial tensile, as well as bending stress”). The specification of the ’398 patent lists a wide range of materials as

appropriate for the insert: aluminum, titanium, “other metals, composite materials,” and “plastics.” ’398 patent, col. 5, ll. 7-10. In oral argument on appeal, it became apparent that even a pressurized rubber balloon could in some cases be “rigid.” “Rigid” is a very relative term. In fact, the specification states only that the insert must be rigid enough for the invention to work. ’398 patent, col. 3, ll. 29-35; col. 4, l. 61 – col. 5, l. 10. And again, that description would seem to apply only to claim 3.

However, the trial court noted that the inventor distinguished his invention from a prior art reference, U.S. Patent No. 5,180,163 (the ’163 patent), during prosecution of the patent, in a way that would suggest that use of the word “rigid” requires that characteristic in all claims. The inventor characterized the prior art as having a “spine” which was “collapsible and positioned in a bat handle to deaden shock at the bat handle.” In contrast, the inventor noted, the insert of the ’398 patent “is rigid and positioned in a bat impact portion to heighten the response of the impact portion to a batted ball.” Because of the timing and context of this statement, however, this statement suggests only that “rigid” implies “not collapsible upon impact.” Indeed, the specification states that the insert snaps back “which increases the force and velocity of the rebound.” ’398 patent, col. 3, ll. 42-43. Understanding “rigid” to mean only a measure of resistance to shearing is consistent with an insert that snaps back. Furthermore, in amending both claims 3 and 15 to distinguish the ’163 patent, the inventor included “rigid” only in claim 3, but specifically did not include “rigid” in claim 15. Instead, the inventor amended claim 15 to point out that the structural insert “defines an annular gap with the inside wall of the impact portion of the bat,” again suggesting

merely that the insert would not collapse upon impact, but could respond by resisting shearing without being completely unyielding.

Based on this prosecution history, however, the trial court inferred that “rigid” carried great significance for the invention. The trial court opined that “[a] non-rigid structure would not snap back to increase the slugging capacity of the bat,” and that the materials listed in the specification as being appropriate for the insert would “have to be rigid in order to avoid deadening the impact of the ball.” This commentary restates the function of the insert without clarifying the “rigid” limitation. Because it is superfluous and undefined, “rigid” adds nothing to the meaning of the claim, and does not belong in this claim interpretation. See, e.g., United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 233 (1942) (“To sustain claims so indefinite as not to give the notice required by the statute would be in direct contravention of the public interest which Congress therein recognized and sought to protect.”).

Nothing in the claims or specification indicates, explicitly or implicitly, that the inventor intended to impart a novel meaning to “insert.” The record also contains no evidence that “insert” has a particular meaning in the field of art encompassed by the '398 patent. As with “annular,” an ordinary and customary meaning for this term in this art field and within the context of this patent is: “something inserted or intended for insertion.” Webster’s II New College Dictionary (3d ed. 2005).

### III

To reiterate, this court has discussed the claim interpretation based solely on the claim language and the context of the patent. Unfortunately this court lacked the full context of this infringement action and the claim construction component of infringement

because the record on appeal contains no description of the accused infringing devices. Without that additional context, this court cannot fully and confidently review the infringement judgment, including its claim construction component.

This court, of course, repeats its rule that “claims may not be construed with reference to the accused device.” NeoMagic Corp. v. Trident Microsystems, Inc., 287 F.3d 1062, 1074 (Fed. Cir. 2002); SRI Int’l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1118 (Fed. Cir. 1985) (en banc). As noted earlier, that rule posits that a court may not use the accused product or process as a form of extrinsic evidence to supply limitations for patent claim language. Thus, the rule forbids a court from tailoring a claim construction to fit the dimensions of the accused product or process and to reach a preconceived judgment of infringement or noninfringement. In other words, it forbids biasing the claim construction process to exclude or include specific features of the accused product or process. The rule, however, does not forbid awareness of the accused product or process to supply the parameters and scope of the infringement analysis, including its claim construction component. In other words, the “reference” rule accepted in Pall Corp., Multiform Dessicants, and Scripps Clinic does not forbid any glimpse of the accused product or process during or before claim construction. Pall Corp., 181 F.3d at 1308; Multiform Dessicants, 133 F.3d at 1478; Scripps Clinic, 927 F.2d at 1580. In light of these principles, if the litigants cannot themselves inform a trial court of the specific issues presented by the infringement inquiry—that is, issues of the breadth of the claim construction analysis and the most useful terms to facilitate that defining process—then a trial court may refer to the accused product or process for that context during the process. For instance in this case, this court is puzzled by the

relevance of “rigid” in this claim construction analysis. Without the full infringement context, including some record evidence about the accused devices, this court does not fully understand the necessity for inserting “rigid” into claims without that express language. Moreover, this court cannot assess the meaning of “rigid” in the context of this invention.

In this case, the parties stipulated that the accused device infringed under the trial court’s claim construction. This court had before it absolutely no evidence on record about the accused devices. Thus, the insertion of the word “rigid” appears superfluous and this court has so stated. On remand, in the context of a detailed examination of the alleged infringement of particular claims by the accused devices, the trial court may reconsider its construction in light of this opinion.

Accordingly, this court vacates and remands to the district court for a detailed analysis of the disputed claim construction, and for any further findings or conclusions.

#### COSTS

Each party shall bear its own costs.

VACATED and REMANDED