United States District Court,
W.D. Washington, at Seattle.

Paul N. NELSON,
Plaintiff.
v.
K2 INC. and K-2 Corporation,
Defendants.

No. C07-1660RSL

July 17, 2008.

Philip P. Mann, Mann Law Group, Seattle, WA, John E. Whitaker, Whitaker Law Group, Bainbridge Is, WA, for Plaintiff.

Douglas Anderson Grady, Lawrence D. Graham, Black Lowe & Graham, Seattle, WA, for Defendants.

ORDER CONSTRUING CLAIMS OF THE '522 PATENT

ROBERT S. LASNIK**, District Judge.**

Plaintiff Paul N. Nelson is the owner of United States Patent No. 5,603,522 ("the patent" or "the '522 patent"), which relates to a wide, short ski designed to produce "maximum energy efficiency in all snow conditions ...." Col. 1, ll. 48-49. The invention is briefly described through dimensional ranges and performance criteria in three claims set forth at Col. 16, ll. 9-59 of the patent. The parties disagree regarding the interpretation of six words and clauses contained in independent claim 1. Plaintiff alleges that defendants have infringed the '522 patent by making and selling products that embody at least one claim of the patent, or by inducing others to infringe the patent.

Determining whether a particular product infringes an existing patent involves a two-step analysis. The Court must first identify the proper construction of the asserted patent claim, an exercise which the Supreme Court has determined is a matter of law. Markman v. Westview Instruments, Inc., 517 U.S. 370, 384-91, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). After the claim has been properly construed, the fact finder determines whether the accused device infringes the claim. The Federal Circuit recently reiterated that, although the claims of the patent define the invention to which the patentee is entitled the right to exclude, the claim construction analysis must focus on how a person of ordinary skill in the art would understand the claim terms after reading the entire patent. Phillips v. AWH Corp., 415 F.3d 1303, 1321, 1323 (Fed.Cir.2005).

It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor's words that are used to describe the invention-the inventor's lexicography-must be understood and

interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decisionmaking process by reviewing the same resources as would that person, *viz.*, the patent specification and the prosecution history.

Phillips, 415 F.3d at 1313 (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed.Cir.1998)).

The *Phillips* decision sets out a framework for claim construction that synthesizes prior law while rejecting the earlier tendency to over-emphasize extrinsic evidence. The claims themselves, rather than dictionaries, encyclopedias, and treatises, provide a context for the contested terms and comparisons against which to measure the scope of the various claims. Phillips, 415 F.3d at 1314-15. Unless the meaning of the claim language is "readily apparent even to lay judges" (Phillips, 415 F.3d at 1314), the court should "rely heavily" on the patentee's written description of the invention (Phillips, 415 F.3d at 1317), giving the claims "their broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art' " (Phillips, 415 F.3d at 1316 (quoting In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed.Cir.2004))). Other evidence of how the patentee and the PTO understood the claims contained in the prosecution history can also inform the meaning of the claim language, although the Federal Circuit warns that this resource sometimes lacks the clarity of the patent itself. Phillips, 415 F.3d at 1317.

When interpreting claim terms, district courts may also "rely on extrinsic evidence, which 'consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Phillips, 415 F.3d at 1317 (quoting *Markman,* 52 F.3d at 980). Such evidence is especially useful for helping the court understand the underlying technology, explaining how an invention works, and establishing the way in which one skilled in the art would use the claim terms. Phillips, 415 F.3d at 1318. Courts should not, however, put too much emphasis on extrinsic evidence as the starting point for construing claim terms because such evidence "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Phillips, 415 F.3d at 1319. The claim construction methodology set forth in Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed.Cir.2002), which encouraged district courts to rely on dictionary definitions when ascertaining the ordinary meaning of particular claim terms, with recourse to the specification serving only as a check on the dictionary definition, was rejected.

The main problem with elevating the dictionary to such prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent. Properly viewed, the "ordinary meaning" of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.

Phillips, 415 F.3d at 1321.

Even while rejecting the methodology of *Texas Digital,* the Federal Circuit acknowledged that the purpose underlying that decision, namely to avoid "one of the cardinal sins of patent law-reading a limitation from the written description into the claims," was sound. Phillips, 415 F.3d at 1319-20, 1323 (quoting SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1340 (Fed.Cir.2001)). The court also recognized:

that the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice. However, the line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms. For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments. In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. That is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, but also because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.

Phillips, 415 F.3d at 1323 (citations omitted).

In this litigation, the parties dispute the meaning of certain terms and phrases in independent claim 1, which reads:

1. A wide short snow ski, for use in a pair, comprising:

a forward shovel portion having a maximum transverse width in the range of approximately 110 to 120 millimeters, and a rearward, tail portion having a maximum transverse width in the range of approximately 105 to 115 millimeters, and wherein

said shovel portion has a rearwardly tapering region and said tail portion has a forwardly tapering region, said rearwardly and forwardly tapering regions coming together to define a waist portion of said ski, said waist portion having a transverse width that is less than the maximum transverse width of said shovel and tail portions, respectively, and further,

said shovel, waist and tail portions defining the total length of said ski, said ski length being within the range of about 148 and 173 centimeters, and further,

said shovel portion includes a tip curving upwardly from a forward location on said shovel portion, and said tail portion has an end curving upwardly from a rearward location on said tail portion, and further, said ski has an upward camber substantially between said forward and rearward locations, and still further, said rearwardly and forwardly tapering regions of said shovel and tail portions, respectively, are geometrically defined by symmetric, concave arcs, wherein the arc of curvature of each one of said arcs is defined by a sidecut radius within the range of approximately 14 meters to 28 meters, said arcs defining the transverse width of said waist portion, said ski further including reinforcing at said waist portion for purpose of mounting bindings, whereby

within said width and length ranges, in combination with said range of sidecut radii, and the flotation provided by the area bounded by said ranges of said widths, said lengths and said sidecut radii, less physical force is required in overcoming the torsional resistance associated with making turns.

Having reviewed the memoranda and exhibits submitted by the parties and having heard the arguments of counsel and reviewed the additional evidence offered at the hearing on July 16, 2008, the Court finds as

follows:

(1) The terms "about" and "approximately" are in dispute. Both parties agree that the terms should be given the same definition, but they disagree on what that definition should be. Plaintiff argues that the terms should not be construed because the jury will be able to interpret them when asked to compare the claim with the allegedly infringing product. Interpretation of the patent is, however, a matter of law to be decided by the Court. Markman, 517 U.S. at 384-91. Although "almost" and "approximately" are common terms that are generally within the understanding of the jury, they do not have universal meanings in patent cases and often must be construed in order to resolve the parties' dispute regarding the outer boundaries of an invention. *See, e.g.,* Ortho-McNeil Pharm., Inc. v. Caraco Pharm. Labs., Inc., 476 F.3d 1321, 1326 (Fed.Cir.2007). In this case, the proper interpretation of the terms is not readily apparent: even plaintiff has been unable to settle on a single definition of the terms. At various times in the litigation, he has taken the position that "about" and "approximately" encompass values within 2%, 3%, and/or 5% of the stated measurements. The terms cannot change meaning based on the whims and/or litigation needs of the inventor. Rather, the Court must determine how a person of ordinary skill in the art, who has read the terms in the context of the claims, the specification, and the prosecution history, would have understood "about" and "approximately" at the time of the invention. Ortho-McNeil Pharm., 476 F.3d at 1326.

Defendants argue that "about" and "approximately," when used before a numerical measurement, mean "almost exactly, and within 0.1 mm of the stated measurement." This definition reflects neither the ordinary meaning of the terms nor a limitation set forth in the patent. "Approximately" and "about" are generally understood to provide flexibility by avoiding strict numerical boundaries. Defendants, however, seek to replace the imprecise and malleable terms used by the inventor with a fixed measurement that purportedly reflects the industry's measurement tolerance uncertainty. In effect, defendants want to limit the invention to those skis with measurements that fall within the stated boundaries or at least close enough that the industry cannot measure the difference. "About" does not mean "exactly," and neither defendants nor their expert offer any compelling reason why the Court should adopt an interpretation of "about" and "approximately" that is so contrary to the terms' ordinary meaning.

The question, then, is how broadly or narrowly should the terms be construed in light of the context provided by the claims, the specification, and the prosecution history. In short, how would one skilled in the art understand the importance of the stated limits at the time of the invention? The intrinsic evidence points to a construction that is relatively narrow. Although the individual measurements set forth in the claim do not appear to be critical to achieving the benefits offered by the invention, the prosecution history shows that the inventor and the patent office considered certain changes to be significant. For example, plaintiff represented to the patent office that a decrease in shovel width of 4 mm would generate a product outside the scope of his patent, despite the inclusion of the terms "about" and "approximately" in the claim. Similarly, plaintiff distinguished his invention from the Richmond ski on several grounds, including the fact that Richmond's sidecut radius was .9 meters longer than the upper boundary set forth in plaintiff's claim. Finally, plaintiff modified the length of his skis in increments of 5 cm, suggesting that the flexibility inherent in "about" and "approximately" does not extend that far. Comparing these increments to the mean product measurements set forth in claim 1, it is clear that the inventor did not believe that "approximately" and "about" increased or decreased the stated boundaries by more than 3%.

Plaintiff has offered the opinion of Stephen M. Evans, an attorney at Graybeal Jackson Haley LLP, as evidence that "about" and "approximately" include a variance of 5% of the claimed range. Absent evidence that Mr. Evans is one skilled in the art of designing and/or manufacturing skis, his opinion regarding the

proper interpretation of the claim terms is not useful to the Court. Network Commerce, Inc. v. Microsoft Corp., 422 F.3d 1353, 1361 (Fed.Cir.2005) (quoting Phillips, 415 F.3d at 1318). The Court therefore relies on the intrinsic evidence provided by the parties to construe "about" and "approximately" to mean "within 3% of" the mean of the stated measurements.

(2) Both parties agree that an "upward camber" is an upward arch or curvature. Defendants argue that additional limitations should be included in the definition to reflect the significant arch shown in Figure 3 of the specification. Although diagrams of the preferred embodiment can be used to support a broad interpretation of the claim to ensure that the preferred embodiment falls within the scope of the patent, "patent coverage is not necessarily limited to inventions that look like the ones in the figures." MBO Labs., Inc. v. Becton, Dickinson & Co., 474 F.3d 1323, 1333-34 (Fed.Cir.2007). Because every idea encompassed by the term "upward camber" is expressed by the phrase "upward arch or curvature," the Court will not adopt defendants' proposed construction requiring an arch of sufficient magnitude to create a "visible gap."

(3) Claim 1 provides that the tapering of the shovel and tail portions of the ski "are geometrically defined by symmetric, concave arcs, wherein the arc of curvature of each one of said arcs is defined by a sidecut radius within the range of approximately 14 meters to 28 meters ...." Plaintiff argues that "sidecut radius," as used in this clause, is clear and requires no construction. In the alternative, plaintiff offers two definitions which, when combined, equate "sidecut radius" with "the approximate radius of curvature of the arc that creates the edge of the ski." No explanation or justification is given for the inclusion of the word "approximate" in this definition. The term "sidecut radius" is singular: one radius generates one curvature of the arc. Any variation of the radius length would create a different sidecut arc. Neither the claim text nor the intrinsic evidence support an interpretation of "sidecut radius" that would include a range of radius lengths for any single manifestation of the device. FN1

FN1. At the *Markman* hearing, plaintiff presented ISO/FDIS International Standard s in an attempt to show that the industry interprets "sidecut radius" to mean "the approximation of the average radius" of the outline of the ski. Plaintiff's Ex. 3. While evidence of a specialized meaning within the industry would normally be persuasive, the document submitted by plaintiff is a draft and was generated in 2003, six years after the '522 patent issued. The Court finds that the extrinsic evidence submitted is not relevant to how one skilled in the art would have interpreted "sidecut radius" at the time of the invention.

Defendants' proposed construction of "sidecut radius" is "a fixed-length radius that defines the arc of curvature along the entire sidecut portion of the ski." Plaintiff objects to this definition because it requires a single radius length. As noted above, however, the claim states that the arc of the sidecut is generated by a radius, singular, not by radii, plural. Contrary to plaintiff's argument, such an interpretation does not make the tapering limitation redundant: the radius of the arc of curvature further defines the tapering discussed elsewhere in the claim. Based on the intrinsic evidence provided by the parties, the Court finds that "sidecut radius," as used in claim 1, means "the single radius of curvature of the arc that creates the edge of the ski."

(4) The parties also dispute the phrase "said arcs defining the transverse width of said waist portion." Defendants propose an interpretation that explicitly states the minimum and maximum widths of the waist portion. Defendants do not, however, identify any word or term within the phrase that is confusing or ambiguous. Using the Court's construction of "approximately" and "sidecut radius," it is clear that the patent encompasses any waist width that can be generated from the stated shovel widths, tail widths, and radii lengths, (plus-or-minus sign) 3%. The inventor's stated preference for a waist between 82 mm and 99 mm is

not a limitation on the invention and will not be read into the claim.

(5) Finally, the parties do not agree on the import of the last section of claim 1, which states:

within said width and length ranges, in combination with said range of sidecut radii, and the flotation provided by the area bounded by said ranges of said widths, said lengths and said sidecut radii, less physical force is required in overcoming the torsional resistance associated with making turns.

Plaintiff states that no construction is necessary, but then offers an interpretation of the word "ranges" and ignores the performance limitation contained in the last clause of the section. While the Court agrees that the references to "width and length ranges" incorporates the (plus-or-minus sign) 3% implied by the words "about" and "approximately," the requirement that the ski produce the claimed advantage of requiring less physical force while turning cannot be read out of the claim. Defendants, on the other hand, have not shown that one skilled in the art would read this section and the other intrinsic evidence to impose specific limitations on the width of the waist portion. Importation of the inventor's preference for an 82-99 mm waist into this general claim would be improper, and yet that is exactly what defendants' expert does. Using the constructions discussed above, the Court finds that this clause means that a ski generated using the measurements specified in the claim, (plus-or-minus sign) 3%, must also require less physical force to overcome the torsional resistance associated with turning in order to fall within the claim.

It is so ORDERED.

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