

United States District Court,
N.D. Illinois, Eastern Division.

DEERING PRECISION INSTRUMENTS, L.L.C.,
Plaintiff.

v.

VECTOR DISTRIBUTION SYSTEMS, INC., Gram Precision Scales, Inc., Bonso Electronics International, Inc. and Mohan Thadani,
Defendants.

Sept. 4, 2001.

MEMORANDUM OPINION AND ORDER

LEINENWEBER, J.

Deering Precision Instruments, LLC ("Deering") owns United States Patent No. 4,744,428 (the "'428 Patent") for a lightweight portable scale that is small enough to be carried in a person's pocket. In its complaint, Deering alleges that Bonso Electronics International, Inc. ("Bonso") manufactures a pocket scale, the "VX-10," for Vector Distribution Systems, Inc. ("Vector") and its alleged alter ego Gram Precision Instruments ("Gram") that infringes the '428 Patent. Deering alleges that Bonso infringed its patent, contributed to infringement by its co-defendants, and/or induced infringement by others. Before the court is Vector's Motion for Summary Judgment of Noninfringement.

BACKGROUND

The '428 Patent was issued to Deering on May 1, 1988. Generally, the patent discloses a lightweight portable scale with sliding weights and an associated carrying case. The '428 Patent has five claims, and Deering alleges that the defendants infringe Claims 1, 2, 4 and 5. For the purpose of this Motion for Summary Judgment, only one element of those claims is at issue. Claim 1 states as follows:

A lightweight portable scale comprising a base, a beam having a substance holder at one end thereof and a scale extending toward the opposite end thereof, a sliding weight movably carried by said beam for movement along said scale, a pair of metallic fulcrum posts projecting upwardly from said base, and a pair of metallic bearing inserts in said beam for cooperation with said fulcrum posts, one pair of the pair of posts or the pair of inserts having pointed projections thereon receivable in tapered recesses in the other pair for positioning and pivotally supporting said beam, said sliding weight being movable from a zero position to a position near the said opposite end of the beam and *said sliding weight when in its zero position having a portion thereof disposed substantially in an imaginary plane containing the fulcrum of the beam, whereby to minimize the weight of the substance holder required to balance the beam when the sliding weight is in its zero position.*

'428 Patent, col. 6: 12-30 (emphasis added). Claim 2 is dependent on Claim 1. Claim 4 is an independent

claim that contains the same zero position limitation, and Claim 5 is dependent on Claim 4.

The following facts are taken from the parties' fact statements and are undisputed. The '428 Patent was filed as U.S. Patent Application No. 06/912,912 on September 29, 1986, by David G. Knotter, Donald Levin, and Jody L. Numbers (the "applicants"). (Defendant's Stmt. Facts, at para. 3.) The original application contained ten claims, and Claims 1 and 9 were independent claims. (*Id.* at para. 4.) On April 24, 1987, the U.S. Patent and Trademark Office (the "USPTO") issued an office action that rejected Claims 1, 2, and 5-7 as obvious under 35 U.S.C. s. 103 and objected to Claims 3, 4, and 8-10 as being dependent upon a rejected base claim. (*Id.* at para. 8, 9.) In response to the office action, the applicants filed an amendment, that, among other things, canceled original Claim 1 and submitted original independent Claim 11. (*Id.* at para. 13-15.) The examiner issued a Notice of Allowability on January 13, 1988, allowing original Claims 4 and 9-12. (*Id.* at para. 21.) Original independent Claim 11 eventually issued as patent Claim 1. (*Id.*) In that claim, the language stating that the sliding weight, when in its zero position, has a portion thereof "disposed substantially in an imaginary plane containing the fulcrum of the beam, whereby to minimize the weight of the substance holder required to balance the beam when the sliding weight is in its zero position" was added by the Amendment to obtain allowance of the claim. (*Id.* at para. 24, 25.)

Vector's VX-10 scale has two slidable weights that are movable along the balance beam of the scale, and the larger of the weights contains a metallic insert. (*Id.* at para. 28, 29.) The VX-10 has an additional fixed weight on the substance holder that increases the weight. (*Id.* at para. 31.) Further, when each slidable weight is in its zero position, no part of any of them extend into the imaginary plane of the fulcrum. (*Id.* at 32.)

Deering alleges that Vector's VX-10 scale contains every claim limitation in Claims 1, 2, 4, and 5 of the '428 Patent. In its Motion for Summary Judgment, Vector argues that its scale does not infringe the patent because when the sliding weight is in the zero position it is not "disposed substantially in an imaginary plane containing the fulcrum of the beam." Vector argues that its weight does not even touch the imaginary plane, and therefore could not be "substantially in [the] imaginary plane."

DISCUSSION

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admission on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." FED. R. CIV. P. 56(c). When deciding a motion for summary judgment, the court must consider the evidence in the light most favorable to the non-movant and draw all justifiable inferences in the non-movant's favor. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 106 S.Ct. 2505, 2513 (1986).

"An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed.Cir.1995) (*en banc*), *aff'd.*, 517 U.S. 370 (1996). Claim construction is a question of law, while infringement, whether literal or under the doctrine of equivalents, is a question of fact. *Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091, 1105 (Fed.Cir.2000). To construe a claim, the court primarily consults the intrinsic evidence, consisting of the claims themselves, the written description portion of the specification, and the prosecution history. *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582-83 (Fed.Cir.1996). "In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term."

Id. at 1583. If necessary, the court may also consider extrinsic evidence, such as expert testimony, inventor testimony, dictionary definitions, and technical treaties, but this extrinsic evidence may not be used to vary or contradict the terms of the claim. *Markman*, 52 F.3d at 981.

A literal infringement issue is properly decided on summary judgment "when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device." *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed.Cir.1998). A claim of infringement under the doctrine of equivalents may be decided on summary judgment

where the evidence is such that no reasonable jury could determine two elements to be equivalent ... Of course, the various legal limitations on the application of the doctrine of equivalents are to be determined by the court ... [I]f prosecution history estoppel would apply or if a theory of equivalence would entirely vitiate a particular claim element, partial or complete summary judgment should be rendered by the court, as there would be no further material issue for the jury to resolve.

Id. at 1353-54, *citing* *Warner-Jenkinson v. Hilton Davis Chem. Co.*, 520 U.S. 17, 38, n. 8, 117 S.Ct. 1040, 1053, n. 8 (1997). Thus, the court must first determine whether prosecution history estoppel applies, *i.e.*, whether an aspect of the originally claimed subject matter was surrendered by amendment and is thus outside the range of equivalents to which the patentee is entitled. *Bai*, 160 F.3d at 1354. If prosecution history estoppel does not apply, the court must then determine whether a reasonable jury could find that the accused device contains elements that are equivalent to each of the claim elements. *Id.*

Claim Construction

For purposes of this motion for summary judgment, Vector has conceded that its scale has all of the elements of the patent claims with the exception of the element of the sliding weight "when in its zero position having a portion thereof disposed substantially in an imaginary plane containing the fulcrum of the beam." For convenience, the court will refer to this element as the "zero position" element.

The principal objective of this patent is "to provide a lightweight, miniaturized, portable scale which can easily and comfortably be transported in a person's shirt or coat pocket." '428 Patent at 2:32-35. Thus, the goals are to reduce the size and weight of the scale and to be able to manufacture the scale easily and inexpensively. The scale is composed of a carrying case and a weighing mechanism that comprises a balance beam mounted for pivotal movement on a fulcrum provided by a pair of fulcrum posts. In order to weigh amounts up to the desired capacity, the scale must either have a long balance beam or use a heavy coarse sliding weight, which would increase both the size and the weight of the scale. *Id.* at 1:57-61. In the patent, the length of the balance mechanism of the scale is kept to a minimum by using a sliding weight that has a metallic insert to add to its mass, which allows the scale portion to be shortened but still have the higher weighing capacity. *Id.* at 1:43-48. The specification explains that in order to hold down the mass of the scale, the sliding weight "is constructed in such a manner that the metallic insert therein rests essentially in the plane of the fulcrum for the balance beam when the sliding weight is in its zero position. In this position the metallic insert is essentially neutral so far as the balance of the mechanism is concerned." *Id.* at 1:51-56. In the best mode section, the specification further explains, referring to the drawings,

the coarse weight 35 is constructed in such a manner that the heavy metallic insert therein is offset from the pointer 37 of the weight in the direction of the fulcrum 19 for the balance beam 18. Indeed, the metallic

insert 44 is offset to an extent that when the coarse sliding weight 35 is in its zero position, adjacent the cross-bar portion 27 of balance beam 18, the metallic insert is disposed substantially in the plane of fulcrum 19, *i.e.*, the imaginary vertical plane containing the center lines of fulcrum posts 21 and 22. With the center of insert 44 aligned [*sic*] precisely in the plane of fulcrum 19 the insert becomes essentially neutral so far as balance of the balance beam 18 and the holder 28 are concerned when the weight 35 is in its zero position and the holder 28 is empty.

Id. at 5:12-27. When the coarse weight is moved away from the zero position and "moved away from the plane of [the] fulcrum" the full mass of the metallic insert can be used to offset and measure the weight of substances. Id. at 5:31. Thus, Claims 1 and 4 specifically define this feature of the invention: "said sliding weight when in its zero position having a portion thereof disposed substantially in an imaginary plane containing the fulcrum of the beam, whereby to minimize the weight of the substance holder required to balance the beam when the sliding weight is in its zero position." Id. at 6:25-30, 57-62.

Vector argues that its scale does not literally infringe Claims 1, 2, 4, and 5 of the '428 Patent because it does not have a sliding weight that, when in the zero position, is in the imaginary plane of the fulcrum. Vector argues that the court should construe the claim limitation "substantially in the plane of the fulcrum" to mean that a substantial portion of the weight has penetrated and rests in the imaginary plane. Vector argues that no portion whatsoever of the sliding weight in its scale extends into the plane of the fulcrum or even any plane containing any part of the fulcrum post, and, in fact, it is physically impossible for the sliding weight of the vector scale to enter the imaginary plane of the fulcrum.

Deering, of course, argues for a broader construction of this element. Deering argues that Vector's claim interpretation reads out the term "substantially" from the claim language. Deering proposes that the court construe the claim language, "disposed substantially in the plane of the fulcrum," as meaning that the weight is either at or "close to" the plane of the fulcrum so as to minimize the weight of the beam. (Deering's Mem., at 6.) Under Deering's proposed construction, the weight need not enter the imaginary plane but need only be close to the plane. Thus, Deering argues that the weight in Vector's scale, which its expert asserts is only 1/10 inch away from the fulcrum, is "substantially in the plane of the fulcrum."

After reviewing the intrinsic evidence, the court finds that Vector's claim construction is correct and supported by the claim language and the specification. The claims require that the weight be "disposed *substantially in* an imaginary plane containing the fulcrum." (Emphasis added.) The patent covers a scale where the weight is "substantially in" the plane, not a weight that is outside but close to the plane. In common usage, "substantially" means significantly or considerably. In the claims at issue, the word "substantially" describes how the weight is "disposed" in the "imaginary plane." The specification sheds further light on the proper construction when, in reference to the relationship between the weight and the imaginary plane, it states that the metallic insert "rests essentially in the plane of the fulcrum for the balance beam." Id. at 1:51-56. When describing the best mode for carrying out the invention, the specification states that "[w]ith the center of insert 44 aligned [*sic*] precisely in the plane of fulcrum the insert becomes essentially neutral." Id. at 5:22-24. While this describes the best mode for carrying out the invention, it indicates that the intent is to have the weight "in" the "imaginary plane," and in the best mode it would be "precisely in the plane." Thus, the court construes the element requiring the sliding weight to be "disposed substantially in an imaginary plane containing the fulcrum" to mean that the weight must enter and penetrate the imaginary plane containing the fulcrum of the beam.

Furthermore, Deering argues that summary judgment is not appropriately granted under FED.R.CIV.P. 56(F)

because Vector has not responded to outstanding discovery requests. The discovery sought, like the affidavits submitted by both parties, is extrinsic evidence. Because the court finds that, based solely on the intrinsic evidence, the meaning of the claim element here is not ambiguous, it is not necessary to consult extrinsic evidence. *See Key Pharms. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed.Cir.1998) (trial court properly relies upon extrinsic evidence "on an ultimate claim construction question in cases in which the intrinsic evidence (*i.e.*, the patent and its file history-the "patent record") does not answer the question.")

As Deering does not argue that any portion of the weight in Vector's scale enters the plane of the fulcrum, there cannot be literal infringement. The Vector scale does not contain every element of the patent claims. As there is no genuine issue of material fact regarding literal infringement, Vector's motion for summary judgment on literal infringement is granted.

Doctrine of Equivalents

Next, Vector argues that Deering is estopped from asserting infringement under the doctrine of equivalents because of prosecution history estoppel. An accused product that does not literally infringe a claim may infringe under the doctrine of equivalents if "it performs substantially the same function in substantially the same way to obtain the same result." *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608, 70 S.Ct. 854, 856 (1950). The doctrine of equivalents, however, is not a tool for expanding the protection of a patent after issuance. *See Hormone Research Foundation, Inc. v. Genetech, Inc.*, 904 F.2d 1558, 1564 (Fed.Cir.1990). Prosecution history estoppel "limits the range of equivalents available to a patentee by preventing the recapture of subject matter surrendered during prosecution of the patent." *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579 (Fed.Cir.1995), *citing*, *Townsend Eng'g. Co. v. HiTiec Co.*, 829 F.2d 1086, 1090 (Fed.Cir.1987).

Recently, the Federal Circuit fundamentally changed the law regarding prosecution history estoppel. In *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Company*, 234 F.3d 558 (Fed.Cir.2000) (*en banc*), *cert. granted*, 121 S.Ct. 2519 (2001), the Federal Circuit held that there is no range of equivalents for a claim limitation where the claim was amended for any reason related to patentability during prosecution. Any amendment "that narrows the scope of a claim for any reason related to the statutory requirements for a patent" will give rise to prosecution history estoppel with respect to the amended claim element. *Id.* at 566. The majority held that "[w]hen a claim amendment creates prosecution history estoppel with regard to a claim element, there is no range of equivalents available for the amended claim element." *Id.* at 569. The court further stated that "[w]hen no explanation for a claim amendment is established, no range of equivalents is available for the claim element so amended." *Id.* at 578.

Deering concedes that *Festo* limits the range of equivalents available on the zero position element in Claim 1 and dependent Claim 2 because it amended those claims during prosecution to achieve allowance of the claim. However, Deering argues that *Festo* does not apply to Claims 4 and 5 because it did not amend those claims during prosecution. Deering argues that the examiner initially objected to Claims 4 and 5 because he mistakenly thought they depended on earlier claims, but the claims were not amended during prosecution.

In *Builders Concrete, Inc. v. Bremerton Concrete Products Company*, 757 F.2d 255 (Fed.Cir.1985) the Federal Circuit addressed a similar situation. Only one claim, Claim 10, was at issue in the litigation, and the applicant did not amend Claim 10 during prosecution. Even though Claim 10 was not amended, the court found that the applicant's arguments to support patentability of a different claim that contained the same claim element relinquished equivalents to that element in Claim 10. The court explained that

[a]lthough Claim 10 is the only claim in suit, the prosecution history of all claims is not insulated from review in connection with determining the fair scope of Claim 10 ... The fact that the 'passage' clause of patent Claim 10 was not itself amended during prosecution does not mean that it can be extended by the doctrine of equivalents to cover the precise subject matter that was relinquished in order to obtain allowance of Claim 1. It is clear from the prosecution history that the allowance of Claim 1, the broadest claim with respect to the other elements of the float, depended on the amendment narrowing its 'passage' definition to that of Claim 10.

Id. at 260. *See also* Pall Corp. v. Hemasure Inc., 181 F.3d 1305, 1312 (Fed.Cir.1999) ("When a claim limitation is added in order to overcome a specific cited reference, estoppel as to that limitation is generated whether the limitation is added by amendment to pending claims, or by the submission of new claims containing the limitation."); Southwall Tech., 54 F.3d at 1584 ("And once an argument is made regarding a claim term so as to create an estoppel, the estoppel will apply to that term in other claims ... If the arguments made with respect to one claim limit the range of equivalents accorded a term in that claim and that term is later incorporated into another claim, the range of equivalents accorded the other claim must be limited in the same manner.")

Here, Deering has conceded that Claim 1 of the patent was amended during prosecution to add the zero position limitation to obtain allowance of the claim and that *Festo* requires limitation of the range of equivalents for Claim 1 and dependent Claim 2. *See* Deering Precision's Opposition at 10; Plaintiff's Response to Defendants' Statement of Material Facts, at para. 24, 25. Prosecution history estoppel thus bars the application of the doctrine of equivalents to that element in any claim of the patent, including Claim 4 and dependent Claim 5. *See* Builders Concrete, 757 F.2d at 260. "To hold otherwise would be to exalt form over substance and distort the logic of this jurisprudence, which serves as an effective and useful guide to the understanding of patent claims." *Id.* Therefore, Deering is estopped from asserting infringement under the doctrine of equivalents for the zero position element in Claims 1, 2, 4, and 5.

CONCLUSION

For the foregoing reasons, Defendant Vector Distribution System's motion for summary judgment is GRANTED.

IT IS SO ORDERED.

N.D.Ill., 2001.

Deering Precision Instruments, L.L.C. v. Vector Distribution Systems, Inc.

Produced by Sans Paper, LLC.