

United States District Court,
N.D. California.

LASER DESIGN INTERNATIONAL, LLC; Norwood Operating Company,
Plaintiffs.

v.

BJ CRYSTAL, INC., a California corporation; Cashman Photo Enterprises of Nevada, a Nevada corporation; Crystal Magic, Inc., a Florida Corporation; U.C. Laser, Inc., a New Jersey corporation; Vitro Laser Group U.S.A., Inc., a Nevada corporation; Jimac Marketing Inc., a Canadian corporation; Concord Industries, Inc., a Connecticut corporation; C. Stiefelmayer GmbH & Co. KG, a German limited partnership; Cerion GmbH, a German limited liability company; Crystal Capture Inc., a Texas corporation; Crystal Capture International, LLC, a Nevada limited liability company; G.W. Partners International, Inc., a California corporation; Hirsch Gift Inc., a Texas corporation; Visions in Crystal, Inc., a California corporation; Vitro Laser GmbH, a German limited liability company,
Defendants.
and Related Counterclaim,
and Related Counterclaims.

Nos. C 03-1179 JSW, C 03-3905 JSW

Feb. 7, 2005.

CLAIMS CONSTRUCTION ORDER

JEFFREY S. WHITE, District Judge.

On November 9, 2004, the Court held a claims construction hearing to construe the disputed terms of U.S. Patent No. 5,206,496 (the '496 Patent) pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). After carefully reviewing the parties' papers, hearing the parties' arguments and considering the relevant legal authority, the Court construes the following disputed claim terms within the patent.

BACKGROUND

Plaintiffs seek to prevent Defendants from infringing Plaintiffs' patent. The '496 Patent relates to a method and apparatus for making sub-surface marks inside a transparent object. ('496 Patent at Abstract).

The original '496 Patent was issued on April 27, 1993. On March 25, 1997, plaintiff Laser Design International, LLC and two other entities filed suit in the United States District Court for the Northern District of California, entitled *Laser Design International, LLC, et al. v. Scanova Limited, et al.*, No C 97-20274 ("1997 Litigation"). Judge Ronald M. Whyte issued an order on claims construction of the '496 Patent and on summary judgment in which Judge Whyte addressed additional claim construction issues of the '496 Patent. (Declaration of Brian E. Mitchell in Support of Plaintiffs' Opening Claim Construction Brief

("Mitchell Decl."), Exs. 2, 3). The 1997 Litigation settled before trial pursuant to a Consent Judgment filed on September 8, 1999. (Declaration of Brian E. Mitchell in Support of Plaintiffs' Reply Claim Construction Brief, Ex. 3). The Patent Office then issued a Reexamination Certificate on the '496 Patent. (Mitchell Decl., Ex. 4).

ANALYSIS

A. Legal Standard.

The scope and meaning of the disputed terms of a patent claim are a matter of law for the court to decide. *Markman*, 517 U.S. at 372. To determine the meaning of a patent claim, the court considers three sources: the claims, the specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995) (*en banc*), *aff'd*, *Markman*, 517 U.S. 370.

In construing the claims, the court must begin with an examination of the claim language itself. "[T]he analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point out and distinctly claim the subject matter which the patentee regards as his invention." *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1201-02 (Fed.Cir.2002) (internal quotations and citations omitted). "The terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." *Id.* at 1202; *see also* *Teleflex, Inc. v. Ficosa North American Corp.*, 299 F.3d 1313, 1325 (Fed.Cir.2002). "The claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Aziono*, 158 F.3d 1243, 1248 (Fed.Cir.1998).

The words in the claim must then be interpreted "in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history, if in evidence." *Teleflex*, 299 F.3d at 1324-25. "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

A patentee is presumed to have intended the ordinary meaning of a claim term in the absence of an express intent to the contrary. *York Products, Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572 (Fed.Cir.1996). "The subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history)." *Markman*, 52 F.3d at 985. "Rather the focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean." *Id.* at 986. Indeed, "unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant art." *Texas Digital*, 308 F.3d at 1202 (citations omitted).

Intent to limit the scope of a claim, despite apparently broad language, can be demonstrated in four ways. First, if the patentee "acted as his own lexicographer," and clearly set forth a definition of the disputed term in either the specification or the prosecution history, the court will defer to that definition. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed.Cir.2002) (citations omitted). Second, the court will adopt an altered meaning of a term "if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention." *Id.* at 1367. Third, a claim term will not take on its ordinary meaning "if the term chosen by the patentee so deprives the claim of clarity as to require resort to the other intrinsic evidence for a definite meaning." *Id.* Finally, a term in a means-plus-function claim is

limited by statute to the structure or step described in the patent. 35 U.S.C. s. 112 para. 6.

Under 35 U.S.C. s. 112 para. 6, a patentee may express a claim limitation functionally, without reciting a structure for performing the claimed function. *See* *Envirco Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360, 1364 (Fed.Cir.2000). Such a limitation is construed "to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. s. 112 para. 6. When interpreting claim language governed by 35 U.S.C. s. 112 para. 6, the court must first identify the claimed function and then identify the structure in the written description that correspond to that function. *See* *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1257-58 (Fed.Cir.1999). Section 112 para. 6 does not "permit incorporation of structure from the written description beyond that necessary to perform the claimed function." *Id.* at 1258.

Limitations from the specification (such as the preferred embodiment) cannot be read into the claims, absent an express intention to do so. *See, e.g.,* *Teleflex*, 299 F.3d at 1326 ("The claims must be read in view of the specification, but limitations from the specification are not to be read into the claims.") (citations omitted); *CCS Fitness*, 288 F.3d at 1366 ("a patentee need not describe in the specification every conceivable and possible future embodiment of his invention"); *Altiris v. Symantec Corp.*, 318 F.3d 1363, 1372 (Fed.Cir.2003) ("resort to the rest of the specification to define a claim term is only appropriate in limited circumstances"). To protect against reading limitations from the specifications into the claims, the court should not consult the intrinsic evidence until after reviewing the claims in the light of the ordinary meaning of the words themselves. *Texas Digital*, 308 F.3d at 1204-05 (holding that to act otherwise "invites a violation of our precedent counseling against importing limitations into the claims") (citations omitted).

Only if the analysis of the intrinsic evidence fails to resolve any ambiguity in the claim language may the court rely on extrinsic evidence, such as expert declarations. *Vitronics*, 90 F.3d at 1583 ("[i]n those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper.") Extrinsic evidence should be used only if needed to assist in determining the meaning or scope of technical terms in the claims, and may not be used to vary or contradict the terms of the claims. *Id.* (citing *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1216 (Fed.Cir.1995)).

Dictionaries also may play a significant role in the determination of the ordinary and customary meaning of a claim term. The Federal Circuit has characterized dictionaries as "the most meaningful sources of information to aid judges in better understanding both the technology and the terminology used by those skilled in the art to describe the technology." *Texas Digital*, 308 F.3d at 1203. "Such dictionaries include dictionaries of the English language, which in most cases will provide the proper definitions and usages, and technical dictionaries, encyclopedias and treatises, which may be used for established specialized meanings in particular fields of art." *Inverness Med. Switzerland GmbH v. Princeton Biomeditech Corp.*, 309 F.3d 1365, 1369 (Fed.Cir.2002). FN1

FN1. Although the Federal Circuit has granted a petition for rehearing *en banc* of *Phillips v. AWH Corp.*, 376 F.3d 1382 (2004) and directed briefing on the relative roles that dictionaries and the specification play in claim construction, the Federal Circuit's *en banc* opinion should not affect this order. The Court only considers a dictionary definition in determining the plain language of one term, and it is a definition that both parties agree is correct.

In addition, the court has the discretion to rely upon prior art, whether or not cited in the specification or the

file history, but only when the meaning of the disputed terms cannot be ascertained from a careful reading of the public record. *Vitronics*, 90 F.3d at 1584. Referring to prior art may make it unnecessary to rely upon expert testimony, because prior art may be indicative of what those skilled in the art generally understood certain terms to mean. *Id.* Unlike expert testimony, these sources are accessible to the public prior to litigation to aid in the determination of the scope of an invention. *Id.*

B. Claim Construction.

1. "A plasma by localised ionisation"

Plaintiffs propose that "a plasma by localised ionisation" be construed as: "the effect which may be caused by focusing a high energy density beam at a location in a body of material. For 'localised ionisation' to take place, the beam must possess sufficient energy to cleave molecular bonds and create plasma at the point of focus."

Defendants propose the term be construed as: "creating or causing an electrically neutral, highly ionized gas composed of ions, electrons and neutral particles by the formation of or separation into ions by heat, electrical discharge, radiation or chemical reaction which is confined or restricted to a particular locality."

The specifications in the patent state: "For localised ionization to take place, the beam must possess sufficient energy to cleave molecular bonds and create a plasma at the point of focus." (*See* '496 Patent at 3:51-53). At the hearing, Defendants conceded that the above statement is a reasonable description of the term "localised ionization," but were concerned that such statement was inadequate to define the dispute term because it does not define "plasma." Defendants contend that the plain and ordinary meaning of "plasma" is "an electrically neutral, highly ionized gas composed of ions, electrons, and neutral particles." (Opp. Br. at 8, *citing* American Heritage Dictionary of English Language, Fourth Ed. (2000)). Plaintiffs conceded at the hearing that they agreed this was the definition of plasma, and had no objection to inserting the definition of plasma into the construction of the disputed term.

Accordingly, the Court construes the term "a plasma by localised ionisation" to mean: **"For localised ionization to take place, the beam must possess sufficient energy to cleave molecular bonds and create an electrically neutral, highly ionized gas composed of ions, electrons, and neutral particles at the point of focus."**

2. "Mark"

Plaintiffs propose that that "mark" be construed as: "an area of increased opacity to electromagnetic radiation." Defendants propose the term be construed as: "a single opaque spot or point," but their proposed definition is contradicted by the claims in the '496 Patent. For example, many of the claims refer to a mark that is three dimensional or a mark which consists of one or more numerals, letters or symbols, or a combination thereof. (*See* ' 496 Patent at 8:15-18, 10:7-10; '496 Patent, Reexamination Certificate, at 2:4-6, 2:18, 2:32-34, 3: 9-11, 3:25, 4:8-10, 4:23). The Court therefore rejects Defendants' proposed definition.

While the Court finds that Plaintiffs' proposed definition to be supported by the intrinsic evidence, construing the term "mark" is unnecessary and would be redundant with other terms. *Jack Guttman, Inc. v. Kopykake Enterprises, Inc.*, 302 F.3d 1352, 1357 (Fed.Cir.2002) (rejecting construction which rendered other terms redundant). Claim 1 already defines mark to mean "an area of increased opacity to electromagnetic radiation." (*See* '496 Patent, Reexamination Certificate, at 1:34-35 (Claim 1(c)); *see also*

'496 Patent, Reexamination Certificate, at 1:47-48 (claim 7)). Claim 1(c), with Plaintiffs' proposed definition inserted, would then read "creating a plasma by localised ionisation of the material at said location to create at said location an area of increased opacity to electromagnetic radiation in the form of an area of increased opacity to electromagnetic radiation, substantially without any detectible change at said surfaces or at the surfaces of said body." Inserting such a definition would be redundant, and would not assist the jury in understanding the '496 Patent.

Accordingly, the Court concludes that the meaning of the term mark is already clear from the language of the '496 Patent and thus does not need any further construction.

3. "Mark with a predetermined shape"

Plaintiffs propose that that "mark with a predetermined shape" be construed as: "an area of increased opacity to electromagnetic radiation wherein the predetermined shape is formed by moving the focus of the beam relative to the material." However, at the hearing, Plaintiffs conceded that "moving the focus of the beam relative to the material" was redundant with other claim language.

Defendants propose the term be construed as: "a single opaque spot or point whose shape is predetermined before it is created."

The Court proposed the following construction of the term at the hearing: "an area of increased opacity to electromagnetic radiation wherein the shape is predetermined before it is created." Despite Defendants' objections to the portion of the construction which defines mark ("an area of increased opacity to electromagnetic radiation"), both sides accepted this construction. Due to the analysis above regarding the redundancy problem with defining "mark," the Court amends the construction to read: "mark wherein the shape is predetermined before it is created." The Court concludes that this construction comports with the plain language of the dispute term.

Accordingly, the Court construes the term "mark with a predetermined shape" to mean: "**mark wherein the shape is predetermined before it is created.**"

4. "The mark is three dimensional"

Plaintiffs suggest that this term does not need further construction, but if it must be construed, they propose that "the mark is three dimensional" be construed as: "a mark wherein a predetermined shape is controlled in the x-, y-, and zdimensions." Defendants propose the term be construed as: "a single or opaque spot or point existing in three dimensions."

Judge Whyte construed this term in the 1997 Litigation in a summary judgment order to be "the mark must be controlled in the x-, y-, and zdimensions" because he concluded it was consistent with the plain language of the claim. (Mitchell Decl., Ex. 3). The Court finds Judge Whyte's analysis to be persuasive and supported by the intrinsic evidence. (*See* '496 Patent at 7:50-54 ("The computer 62 may also be used to control the zoom lens 50, if such is provided, enabling the mark to become three dimensional as the beam 12, 26 is focused as different depths with the body of the material.")).

Accordingly, the Court construes the term "the mark is three dimensional" to mean: "**the mark is controlled in the x-, y-, and zdimensions.**"

5. "Internal zone of damage"

Plaintiffs propose that "internal zone of damage" be construed as: "The result of a plasma by localised ionization within a material, wherein the plasma by localised ionization is created substantially without any detectable change at the surfaces of the material or portions of the material." Defendants propose the term be construed as: "an area of opacity inside the volume of material."

At the hearing, the Court suggested the following construction of the term: "an area of increased opacity inside the volume of material without any detectable change at the surfaces of the material." The Plaintiffs accepted this definition at the hearing. Defendants' concern with the Court's proposed construction was that "substantially without any detectable change to the surface" is already an element of claim 41, and thus defining "internal zone of damage" to include this language would create a redundancy problem in that claim. The only support for including "substantially without any detectable change to the surface" is found in the Patent's description of the preferred embodiment. (*See* Patent '496 at 6:35-42). Due to the redundancy problem and the dearth of intrinsic evidence supporting an inclusion of "substantially without any detectable change to the surface," the Court agrees that this phrase should not be included in the construction of the disputed term.

Accordingly, the Court construes the term "internal zone of damage" to mean: **"an area of increased opacity inside the volume of material."**

6. "Means for focusing the beam"

Plaintiffs propose that "means for focusing the beam" does not need any further construction, but if it must be construed, suggests that it be construed as: "the function is focusing the beam; the corresponding structure includes a lens or lenses (including, among other types of lenses, a zoom lens) and any structural equivalents of a lens or lenses)." (Br. at 14).

Defendants propose the term be construed as: "the function is focusing the beam and the structure is a zoom lens or correcting lens."

The parties agree that this term is a means-plus-function claim, which must be construed pursuant to 35 U.S.C. s. 112 para. 6. Moreover, the parties agree that the function is focusing the beam. The only dispute is over the corresponding structure, and even there, the parties' positions are not far apart. Defendants conceded at the hearing that their proposed construction omitted structures disclosed by the Patent. For example, claims 17 and 36 state that "the means for focusing the beam includes a lens element of variable focal length." (*See* Patent '496 at 8:63-64; '496 Patent, Reexamination Certificate, at 2:53-54).

The corresponding structures disclosed in the specifications are: (1) "a lens element of variable focal length either in the form of a correcting lens that focuses the beam at the same depth with the body irrespective of any curvature of the surface thereof, or in the form of a zoom lens so that marks may be made at different depths within the body" (Patent '496 at 4:20-26); (2) "the combined beam 12, 26 is focused by passing through a lens assembly 44 which may include one or more lens elements" (Patent '496 at 6:3-5); (3) "a short focal length lens having a focal length in the range between 20mm and 100mm" (Patent '496 at 6:28-29); (4) "a correcting lens" (Patent '496 at 6:51-54); (5) lens element "of variable focal length and comprises, for example, a flat field lens" (Patent '496 at 6:58-59); and (6) "a zoom lens" (Patent '496 at 6:65).

Accordingly, the Court construes the term "means for focusing the beam" to mean: **"the function is**

focusing the beam; the corresponding structure is a lens assembly which includes one or more lens elements. The lens elements may consist of a zoom lens or lens of variable focal length, a correcting lens, a flat field lens, or any equivalents thereof."

7. "Means for moving the focus of the beam"

Again, Plaintiffs propose that "means for moving the focus of the beam" does not need any further construction, but if it must be construed, suggests that it be construed as: "the function is moving the focus of the beam; the corresponding structure includes (a) one or more movable mirrors (including rotatable mirrors of the preferred embodiment); (b) a lens or lenses (including the zoom lenses configuration of the preferred embodiment); (c) any mechanical or electro-mechanical device which moves the beam source relative to the body of the material; (d) and any combination of (a), (b), or (c); and any structural equivalents thereof." (Br. at 16).

Defendants propose the term be construed as: "the function is moving the focus of the beam and the structure is a least one movable mirror disposed in the path of the beam or a galvanometer mirror."

Judge Whyte construed this term in the 1997 Litigation to mean "(a) one or more movable mirrors (including rotatable mirrors of the preferred embodiment); (b) a lens or lenses (including the zoom lenses configuration of the preferred embodiment); (c) any mechanical or electro-mechanical device which moves the beam source relative to the body of the material; (d) and any combination of (a), (b), or (c); and any structural equivalents thereof." (Mitchell Decl., Ex. 2). Judge Whyte reasoned:

As to subsection (a) of the court's interpretation, the '496 patent contemplates that the means for moving the focus of the beam may include at least one mirror. Col. 4:7-14. Subsection (a) is also consistent with Claim 14 which specifically calls for "at least one movable mirror." Col. 8:51-54.

As to subsection (b), the '496 patent teaches that the means may include a lens element or "zoom lens" which varies the focus depth of the beam within the body of material. Cal. 4:20-27.

As to subsection (c), the '496 patent teaches the use of a stepping motor 34 to move the beam relative to the body of material in the vertical direction. Col. 5:40-45. However, the '496 patent does not disclose or teach an embodiment wherein the body of material is displaced relative to the beam. Plaintiffs' citation to Col. 3:8-11 of the '496 patent does not support the disclosure of such a structure as that portion of the specification only discloses a function rather than any structure which moves the body of the material relative to the focus of the beam.

As to subsection (d), the '496 patent contemplates various combinations of elements (a), (b), and (c) to effect movement of the focus of the beam relative to the body of material. The '496 patent teaches that the means for moving the focus of the beam "*may* comprise at least one movable mirror." Col. 4:8-10 (emphasis added). The '496 patent also discloses that "the means for bring the beam to a focus *may* include a lens element of variable focal length." Col. 4:20-23 (emphasis added); *see also* Col. 7:50-54 ("The computer 62 may also be used to control the zoom lens 50, if such is provided."). In addition, subsection (d) is consistent with dependent claims 14-17 which call for the "movable mirror" and "lens element" limitations separately.

(Mitchell Decl., Ex. 2).

Except for subsection (b), the Court finds Judge Whyte's analysis and construction persuasive. The Patent teaches that lenses may be used to focus the beam, but do not seem to be used to move the focus of the beam. Accordingly, the Court construes the term "means for moving the focus of the beam" to mean: **"(a) one or more movable mirrors (including rotatable mirrors of the preferred embodiment); (b) any mechanical or electro-mechanical device which moves the beam source relative to the body of the material; (c) and any combination of (a) and (b); and any structural equivalents thereof."**

CONCLUSION

Based on the analysis set forth above, the Court adopts the foregoing constructions of the disputed terms. The parties are ordered to submit a further joint case management report pursuant to Patent Standing Order para. 13 within 21 days of the filing of this Order.

IT IS SO ORDERED.

N.D.Cal.,2005.

Laser Design Intern., LLC v. BJ Crystal, Inc.

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