United States District Court,
D. Delaware.

CRYOVAC INC,
Plaintiff/Counter-Defendant.
v.
PECHINEY PLASTIC PACKAGING, INC,
Defendant/Counter-Plaintiff.

No. Civ.A. 04-1278-KAJ

April 13, 2006.

John W. Shaw, Karen E. Keller, Michele Sherretta, Young Conaway Stargatt & Taylor, LLP, Wilmington, Delaware, for Plaintiff, Ford. F. Farabow, Jr., Joann M. Neth, Courtney B. Meeker, Mark J. Feldstein, Rebecca D. Hess, Finnegan, Henderson, Farabow, Garrett & Dunner, L.L .P., Washington, D.C., of counsel.

N. Richard Powers, Connolly Bove Lodge & Hutz, Wilmington, Delaware, for Defendant, Donald P. Cassling, Steven R. Trybus, Shelley Smith, Brian P. O'Donnell, Jenner & Block LLP, Chicago, IL, of counsel.

OPINION

JORDAN**, J.**

I. INTRODUCTION

This is a patent infringement case. Before me are the parties' requests to construe the disputed claim language of U.S. Patent No. 4,755,419 (issued July 5, 1988) (the " '419 patent") pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370 (1996). Plaintiff Cryovac, Inc. ("Cryovac") and Defendant Pechiney Plastic Packaging, Inc., ("Pechiney") have fully briefed their positions and appeared before me in oral argument on December 16, 2005. Jurisdiction is proper under 28 U.S.C. s.s. 1331 and 1338.

II. BACKGROUND

A. *Procedural Background*

Cryovac filed its initial complaint for patent infringement on September 20, 2004 (Docket Item ["D.I."] 1), and amended it on July 25, 2005 (D.I.125) and October 12, 2005 (D.I. 185, the "Second Amended Complaint"). In the Second Amended Complaint, Cryovac accuses Pechiney of infringing claim 11 of the '419 patent (D.I. 185 at para. 11), of willfully Infringing that claim (id. at para. para. 30-34, 44), of tortious interference with contract (id. at para. 21) and of tortious interference with prospective contractual relations (id. at para. 28). In its answer to the Second Amended Complaint (D.I. 260, the "Answer"), Pechiney

denied infringement, and asserted counter-claims that the '419 patent is invalid and unenforceable. (D.I. 260 at 11-15.) The parties are scheduled to try this case to a jury beginning on June 12, 2006. (D.I.237.)

B. ***The Disclosed Technology***

The '419 patent discloses "[a] multilayer film with a combination of oxygen barrier properties, toughness, shrinkability, and good optical properties," ('419 patent, Abstract), used "to package various articles, Including perishable food products" (Id . at col. 1, Ins. 10-11). Cryovac alleges that products sold by Pechiney under the trade name ClearShield(TM) improperly embody the patented technology. (D.I. 185 at para.para. 10-11.) Claim 11 of the '419 patent, the only claim asserted here, claims the following:

An oriented coextruded film having at least seven layers arranged symmetrically comprising:

(a) a core layer comprising an ethylene vinyl alcohol copolymer;

(b) two intermediate layers each comprising a polyamide;

(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and

(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.

(the '419 patent, at col. 9, In. 67-col. 10, In. 9.)

III. APPLICABLE LAW

Patent claims are construed as a matter of law. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454-56 (Fed.Cir.1998) (en banc). "[T]he words of a claim 'are generally given their ordinary and customary meaning." ' Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996)). That ordinary meaning "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Id. at 1313.

To determine the ordinary meaning, the court should review "the same resources as would" the person of ordinary skill in the art. Multiform Dessicants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed.Cir.1998). Those resources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art ." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed.Cir.2004).

"[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms." Phillips, 415 F.3d at 1314. Both "the context in which a term is used in the asserted claim" and the "[o]ther claims of the patent in question" are useful for understanding the ordinary meaning. *Id*.

"[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." ' *Id*. at 1315 (quoting Vitronics, 90 F.3d at 1582). In short, the claims "must be read in view of the specification, of which they are a part." Markman, 52 F.3d at 979. Thus, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." Renishaw PLC v.

Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed.Cir.1998).

On occasion, "the specification may reveal a special definition given to a claim term ... that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." Phillips, 415 F.3d at 1316 (citing CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed.Cir.2002)). The specification may also "reveal an intentional disclaimer, or disavowal, of claim scope by the inventor ... [, which] is regarded as dispositive." *Id.* (citing SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1343-44 (Fed.Cir.2001)).

The court "should also consider the patent's prosecution history ." Markman, 52 F.3d at 980. "Like the specification, the prosecution history provides evidence of how the [Patent and Trademark Office] and the inventor understood the patent." Phillips, 415 F.3d at 1317 (citing Lemelson v. Gen. Mills, Inc ., 968 F.2d 1202, 1206 (Fed.Cir.1992)).

The court may also rely on extrinsic evidence, which is "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman, 52 F.3d at 980. In particular, "dictionaries, and especially technical dictionaries, ... have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology." Phillips, 415 F.3d at 1318 (citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed.Cir.2002)). However, extrinsic evidence is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language." ' C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed.Cir.2004) (quoting Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n, 366 F.3d 1311, 1318 (Fed.Cir.2004)).

During claim construction, "[t]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law." Phillips, 415 F.3d at 1324.

IV. CLAIM CONSTRUCTION

Cryovac alleges that Pechiney's ClearShield products infringe claim 11 of the '419 patent. (D.I. 185 at para.para. 10-11.) In that claim, the parties dispute the meaning of the following claim terms: "oriented," "oriented coextruded film," "arranged symmetrically," and "at least seven layers arranged symmetrically." FN1 (D.I.203, 204.)

FN1. In addition to these two claim terms, in their briefing and their joint claim construction chart, the parties dispute every word in claim 11 of the '419 patent. (*See* D.I. 247 at 1-15; D.I. 203 at 11-38; D.I. 204 at 5-32.) However, the parties essentially agree on the construction of many of those terms, and even where they disagree, they appear to agree that the construction of those terms does not affect the outcome of the case. (*See* D.I. 247 at 3 (construction of the term "film"); Id. at 6 (construction of the term "layers"); D.I. 204 at 6 (Pechiney statement that "it believes that the Court need not address [the] ... claim terms" other than "arranged symmetrically" and "oriented"); D.I. 298 (Oral Argument Transcript) at 8.) Additionally, although the parties dispute the construction of the term "coextruded," both parties agree that to be "coextruded," all of the layers of a film must leave the coextrusion die at the same time. (*See* D.I. 240 at 27; D.I. 298 (Oral Argument Transcript) at 18-19.) Under this definition, Pechiney concedes that the accused ClearShileld film meets this claim limitation. (D.I. 240 at 26-27.) Thus, the issues of infringement and invalidity do not depend on the construction of any of the terms of claim 11 other than those that are construed here. (D.I.

204 at 6; D.I. 298 at 8.)

A. "*Oriented*" *and* "*Oriented Coextruded Film*"

1. The Parties' Proposed Constructions

Cryovac asserts that the term "oriented" should be construed as a part of the term "oriented coextruded film" to mean "a film formed by coextrusion that is then heated to its orientation temperature range and stretched to realign the molecular configuration, this stretching accomplished by a racking or blown bubble process." (D.I. 203 at 11.) Cryovac contends that this construction is supported by the definition given for the term "oriented" in the specification, and that broader constructions were disclaimed during prosecution. (Id. at 11-16.) Pechiney, on the other hand, claims that the term "oriented" should be construed to mean "a polymeric material which has been heated and stretched to realign the molecular configuration." (D.I. 204 at 20.) Pechiney asserts that the language "this stretching accomplished by a racking or blown bubble process" should not be included in the construction of the term oriented, as this language would improperly import a product-by-process limitation into the claim. (Id. at 21-22.) Pechiney further argues that the term "oriented coextruded film" should simply be a combination of the definitions of "oriented" and "coextruded", not a separate claim term, and should be defined to mean "an oriented film formed by coextrusion." (D.I. 204 at 20.)

2. The Court's Construction

The specification of the '419 patent states that "[t]he term 'oriented' and the like is used herein to define a polymeric material which has been heated and stretched to realign the molecular configuration, this stretching accomplished by a racking or blown bubble process." U.S. Patent No. 4,755,419 at col. 3, lns. 45-49. The parties agree that where a patent applicant provides "an explicit definition in the specification for a claim term[,] ... the definition selected by the patent applicant controls." Renishaw PLC, 158 F.3d at 1249.

The dispute between the parties over the construction of the term "oriented" centers on whether the phrase "this stretching accomplished by a racking or blown bubble process" should be included in the construction of the term. (*See* D.I. 204 at 21.) While Pechiney asserts that the inclusion of this phrase improperly imports a product-by-process limitation into the claim (*id.*), Cryovac argues that this final phrase is part of the definition intended by the patentee, and that to define the term differently is inconsistent with the specification of the patent (D.I. 203 at 16-18).

Phillips teaches that claim construction is a practical exercise, in which a claim term is defined to reflect what one of ordinary skill in the art reading the patent would understand. 415 F .3d at 1324 ("[T]here is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence ..."). However, as earlier noted, the language of the specification " '[u]sually ... is dispositive; it is the single best guide to the meaning of a disputed term." ' Id. at 1315 (quoting Vitronics, 90 F.3d at 1582).

Federal Circuit precedent, is seemingly in conflict regarding whether a product-by-process claim is limited by the process disclosed in the claim. In Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, (Fed.Cir.1991), the court stated that "the correct reading of product-by-process claims is that they are not limited to product prepared by the process set forth in the claims." Scripps Clinic & Research Found., 927 F.2d at 1583. However, just over one year later, the Federal Circuit relied on "a line of [Supreme Court]

cases that [stated] the infringement inquiry for product claims with process limitations focuses on whether the accused product was made by the claimed process or its equivalent." Atlantic Thermoplastics Co. v. Faytex Corp., 970 F.2d 834, 842 (Fed.Cir.1992). Thus, the court in *Atlantic Thermoplastics* held that "process terms in product-by-process claims serve as limitations in determining infringement." *Id*. at 846-47. In light of the decisions in *Scripps, Atlantic Thermoplastics,* and the Supreme Court cases cited by the Federal Circuit in *Atlantic Thermoplastics,*FN2 it appears that the determination of whether the process is properly viewed as a limitation is a context-specific inquiry.FN3 Thus, in keeping with the en banc decision of the Federal Circuit in *Phillips,* each claim, whether it contains a product-by-process limitation or not, must be construed in light of the specification.

FN2. Those cases include, inter alia, Smith v. Goodyear Dental Vulcanite Co., 93 U.S. 486 (1877) and Cochrane v. Badische Anilin & Soda Fabrik, 111 U.S. 293 (1884).

FN3. Indeed, in the Federal Circuit's most recent statement on this issue, Smithkline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 2006 WL 435838 (Fed.Cir. Feb. 24, 2006), although the majority stated that it "need not address this controversy here" (*id*. at *4), Judge Newman filed a dissenting opinion which clearly sets out the debate between *Scripps* and *Atlantic Thermoplastics*. *Id*. at *8-11. In her dissent, Judge Newman stated that the rule emphasized in *Phillips,* that "claims are construed in light of the specification ... is not suspended when product and process limitations appear in the same claim." *Smithkline Beecham Corp*., 2006 WL at *9. Judge Newman goes on to state that *Scripps* and *Atlantic Thermoplastics* are "not in conflict; they simply deal with different situations." *Id*. at *10.

Here, the patentee specifically defined the term "oriented" in the specification to include the language "accomplished by a racking or blown bubble process." U.S. Patent No. 4,755,419 at col. 3, lns. 48-49 Additionally, the examples provided by the patentee in the specification strongly suggest that this limitation was intended to be a part of the claim. *See* id. at col. 4, lns. 52-55 (stating that the film was "produced by ... cast coextrusion methods, and subsequently oriented ... typically by means of a blown bubble process"); id. at col. 8, lns. 60-64 ("the coextruded and cooled tube is heated to its orientation temperature range to orient the film in e.g. a blown bubble process"). Under the guidance given by *Phillips,* the language in the specification of the '419 patent "is the single best guide" to the meaning of the term oriented. Phillips, 415 F.3d at 1315. Under Federal Circuit and Supreme Court case law, this is not changed simply because the definition given by the patentee contains a limitation that describes a process. Thus, I will use the definition given by the patentee in the specification, and will construe the term "oriented" to mean, with reference to a polymeric material, "heated and stretched to realign the molecular configuration, this stretching accomplished by a racking or blown bubble process." FN4

FN4. Cryovac asserts that I should construe the phrase "oriented coextruded film" rather than just "oriented." (D.I. 203 at 11-16.) However, the construction of this phrase is simply a combination of the construction of "oriented" given here, and the meaning of "coextruded," on which the parties fundamentally agree (*see supra* note 1). Thus, the term "oriented coextruded film" needs no further definition here.

B. "*Arranged Symmetrically*" *and* "*At Least Seven Layers Arranged Symmetrically*"

1. The Parties' Proposed Constructions

Cryovac argues that the claim term "arranged symmetrically" should be construed as part of the phrase "at least seven layers arranged symmetrically" to mean:

at least the seven layers recited in subparagraphs (a), (b), (c) and (d) of claim 11 arranged such that one layer (b), one layer (c) and one layer (d) are in the same order on each of the opposite sides of the core layer (a), for example c/d/b/a/b/d/c. This claim phrase limits the arrangement of the layers. It does not limit the thickness of the layers. Nor does it limit the amounts of recited components or additives that may be included in the layers.

(D.I. 203 at 24.) In support of their proposed construction, Cryovac argues that the context, grammar, specification, and prosecution history of claim 11 show that only the arrangement of the layers must be symmetrical and that there is no limitation requiring symmetry in the thickness or chemical composition of the layers. (D.I. 203 at 25.) Specifically, Cryovac contends that "symmetrically" modifies "arranged", which shows only that the layers must be in symmetric order, not that "the layers are themselves symmetric." (*Id.*) Additionally, Cryovac argues that the specification of the '419 patent, which has language referring to the thickness of "each" layer, shows that the thickness of the layers can vary individually. (Id. at 27.) Cryovac also asserts that Pechiney's proposed construction would exclude preferred embodiments (Id. at 28), and that the prosecution history does not support the additional limitations Pechiney attempts to read into the claim (id. at 30).

Pechiney, on the other hand, argues that absolute symmetry is required in the thickness of the layers and their chemical composition. Pechiney asserts that the intrinsic evidence in the patent and the ordinary meaning of the terms support its reading of the claim. (D.I. 204 at 7-8.) Pechiney proposes that "arranged symmetrically" should be construed to mean:

Putting the layers in a desired symmetrical order when the film is viewed in cross-section, that is, putting the layers in an order so that the geometrical center line of the core layer is in the geometrical center line of the film and there is correspondence in the size (thickness) and composition of layers being minor images of each other with the same thickness and the same chemical composition.

(D.I. 204 at 7.) Pechiney contends that its construction is consistent with the specification of the '419 patent, as the specification discusses a "symmetrical seven layer structure," but never defines the term "arranged symmetrically," and gives no example in which corresponding layers had different thicknesses. (Id. at 10-13.) Pechiney further argues that because during prosecution Cryovac distinguished claim 11 of the '419 patent from a prior art film that was "asymmetric", that claim 11 only covers films that are symmetrical in arrangement, layer thickness, and layer composition. (Id. at 13-17.) Finally, Pechiney argues that in looking at the whole claim, Cryovac's construction renders the "arranged symmetrically" limitation superfluous. (Id. at 18-20 .) Thus, the dispute between the parties hinges on whether the claim term "arranged symmetrically" refers simply to the order of the layers, as Cryovac asserts, or whether that term requires absolute geometrical symmetry, as Pechiney contends.

2. The Court's Construction

The plain language of claim 11 and the prosecution history of the '419 patent support Cryovac's assertion that the term "arranged symmetrically" requires only symmetrical arrangement of the layers in the film, but not precise identity in the thickness or chemical composition of those layers. First, looking simply at the plain language and grammar of claim 11 of the '419 patent, what is claimed is a film "having at least seven

layers arranged symmetrically." *See* U.S. Patent No. 4,755,419 at col. 9, lns. 67-68. The word "symmetrically" modifies the word "arranged," and thus requires only that the layers should be symmetrical in their arrangement. Nothing about this language requires or even suggests that corresponding layers must be precisely identical in thickness or chemical composition, having geometric symmetry around a center line.

Furthermore, the prosecution history of the '419 patent favors this construction of the term "arranged symmetrically". To support its argument that there must be absolute symmetry in the thickness and chemical composition of the layers of the film, Pechiney attempts to rely on the fact that, during the prosecution of the '419 patent, Cryovac added the "arranged symmetrically" claim limitation to overcome a prior art rejection. (D.I. 204 at 16.) Indeed, Cryovac added this limitation to overcome an obviousness rejection over U.S. Patent No. 4,284,674 to Sheptak ("Sheptak") in view of U.S. Patent No. 4,532,189 to Mueller ("Mueller"). (D.I. 249, Ex. 3 at CR056-000155.) Sheptak, however, disclosed an eight layer film, with five layers that were symmetrically arranged and an additional three layers added to one side of the five layer film, making the overall structure asymmetric. (D.I. 249, Ex. 6 (showing a film orientation of c/b/a/b/c/d/e/f).) Mueller disclosed three and five layer films that appear to have a symmetrical arrangement, although that symmetry is not explicitly claimed. (D.I.216, Ex. 12.)

Cryovac argued during prosecution of the '419 patent that Sheptak disclosed an asymmetrical film and that, as a result, adding the outer layers of the film disclosed in Mueller would still give a structure that was asymmetrical. (D.I. 249, Ex. 3 at CR056-000155.) Cryovac asserted that the film disclosed in the '419 patent had, by contrast, "at least seven layers [that were] ... symmetrically arranged." (Id.) Cryovac claims that through this amendment it was simply distinguishing the prior art by pointing out that the three additional layers added to the Sheptak film's symmetrical layers made that whole film asymmetrical in arrangement, and that such an arrangement would remain asymmetrical even with the addition of the outer layers from Mueller. (D.I. 248 at 29-31.) Nothing about this amendment shows, as Pechiney urges, that Cryovac was asserting with the addition of this limitation that its claimed film had perfect symmetry in thickness and chemical composition of the layers of the film. Accordingly, the prosecution history supports a construction of the term "arranged symmetrically" that does not require precise identity in the thickness and chemical composition of the layers.

Finally, Pechiney urges that if Cryovac's proposed construction is adopted, the "arranged symmetrically" limitation would be superfluous, as the body of the claim describing layers (a), (b), (c), and (d) teaches a film that is arranged symmetrically under Cryovac's definition. However, although the body of the claim does teach that layers (b), (c), and (d) must be put in a symmetrical order, nothing in the body of the claim prevents the addition of layers on one side of the (a) layer. Therefore, without the limitation that the film must be "arranged symmetrically," an additional layer could be added on one side of the (a) layer, making the film have a structure of c/d/b/a/e/b/c/d. Thus, "arranged symmetrically" is not superfluous as I have construed it.

Having determined that precise identity in the thickness and chemical composition of the layers is not required by the term "arranged symmetrically," there still remains the question of just how much alike the corresponding layers must be. The claim language itself provides the answer to that question. Claim 11 of the '419 patent describes the composition of each of the layers of the film. ('419 patent at col. 10, Ins. 1-9.) For example, (b) layers must each comprise a polyamide, and (c) layers must each comprise a "polymeric material or blend of polymeric materials." (Id. at col. 10, Ins. 3-6.) Thus, the chemical composition of the layers of the film claimed in claim 11 of the '419 patent is limited only by the definitions of the layers

themselves, as stated in the claim, and not by the claim term "arranged symmetrically."

Accordingly, I construe "arranged symmetrically" to mean "putting the layers in a desired symmetrical order when the film is viewed in cross-section, so that the layers are in the same order on each side of the core of the film, for example c/d/b/a/b/d/c. This claim phrase limits only the arrangement of the layers, and does not require precise identity in the thickness of the layers or the amounts of recited components or additives that may be included in the layers." FN5

FN5. Cryovac has urged that I construe the phrase "at least seven layers arranged symmetrically" rather than simply "arranged symmetrically." Its proposed construction encompasses limitations set forth not only in that phrase, but also in other parts of the claim. Because the limitations that Cryovac attempts to import into the construction of "at least seven layers arranged symmetrically" are in other parts of the claim, I decline to import them into the construction of this term. Additionally, because the meaning of "at least seven layers" is clear, I have construed only the phrase "arranged symmetrically."

V. CONCLUSION

For these reasons, the disputed claim terms will be construed as follows:

Claim Term	The Court's Construction
"oriented"	The court construes "oriented" to mean, with reference to a polymeric material, "heated and stretched to realign the molecular configuration, this stretching accomplished by a racking or blown bubble process."
"arranged symmetrically"	The court construes "arranged symmetrically" to mean "putting the layers in a desired symmetrical order when the film is viewed in cross-section, so that the layers are in the same order on each side of the core of

	the film, for example c/d/b/a/b/d/c. This claim phrase limits only the arrangement of the layers, and does not require precise identity in the thickness of the layers or the amounts of recited components or additives that may be included in the layers."

An appropriate order will issue.

ORDER

For the reasons set forth in the Opinion issued today, it is hereby ORDERED that the following disputed claim terms of U.S. Patent No. 4,755,419 (issued July 5, 1988) are construed as follows:

Claim Term	The Court's Construction
"oriented"	The court construes "oriented" to mean, with reference to a polymeric material, "heated and stretched to realign the molecular configuration, this stretching accomplished by a racking or blown bubble process."
"arranged symmetrically"	The court construes "arranged symmetrically" to mean "putting the layers in a desired symmetrical order when the film is viewed in cross-section, so that the layers are in the

same order
on each side of the core of
the film, for
example c/d/b/a/b/d/c. This
claim phrase
limits only the arrangement
of the layers,
and does not require precise
identity in
the thickness of the layers or
the
amounts of recited
components or
additives that may be
included in the
layers."

D.Del.,2006.
Cryovac Inc. v. Pechiney Plastic Packaging, Inc.

Produced by Sans Paper, LLC.