

**UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA**

UNITHERM FOOD SYSTEMS, INC.,)
)
 Plaintiff,)
)
 v.)
)
 V.H. COOPER & CO., INC.)
)
 Defendant.)

Case No. 09-CV-0162-CVE-TLW

MARKMAN ORDER

This matter comes before the Court for construction of claims contained in United States Patent No. 7,285,299, entitled “Surface Pasteurization of Cooked Food Products” (the ’299 Patent) and United States Patent No. 6,780,448, entitled “Pasteurization of Food Products” (the ’448 Patent, and together with the ’299 Patent, the Patents). Plaintiff Unitherm Food Systems, Inc. (Unitherm) alleges that defendant V.H. Cooper & Co., Inc. (Cooper) is infringing the Patents. See Dkt. # 20. A hearing was held in this matter on June 1, 2010, pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff’d, 517 U.S. 370 (1996). Based on a review of the record, the Court hereby construes certain claims in the Patents as set forth herein below.

I.

The relevant claims in the ’299 Patent are:

1. A method of surface pasteurizing, already cooked food products wherein each of said already cooked food products has an outer surface, an internal core, and an internal core temperature, said method comprising the steps of:

(a) continuously heating said already cooked food products in a manner effective to take said outer surface to a temperature of at least 155° F.;

(b) then, after step (a), placing said already cooked food products in packages;

(c) then, after step (b), continuously heating said packages of said already cooked food products using water in a manner effective to take said outer surface to a temperature of at least 155° F.; and

(d) then, after step (c), continuously cooling said packages of said already cooked food products,

wherein, except for any incidental heat loss which occurs in conducting said already cooked food products from step (a) to step (b) and from step (b) to step (c), no intervening cooling procedure is performed between step (a) and step (b) and no intervening cooling procedure is performed between step (b) and step (c),

wherein, for each of said already cooked food products, step (a) has a beginning, step (d) has an end, and said internal core temperature at said beginning of step (a) is a beginning core temperature, and

wherein steps (a), (b), (c), and (d) are conducted in a manner effective to prevent said internal core temperature from rising to more than 10° F. above said beginning core temperature at any time from said beginning of step (a) to said end of step (d).

7. The method of claim **1** wherein steps (a), (b), (c), and (d) are conducted in a manner effective such that no substantial increase in said internal core temperature above said beginning core temperature occurs at any time from said beginning of step (a) to said end of step (d).

'299 Patent, col, 10, lns. 32-62; col. 11, lns. 18-22.

The relevant claims in the '448 Patent are:¹

12. A process for surface pasteurizing a food product which has already been cooked, said food product having an outer surface which surrounds said food product and said process comprising the step of exposing said food product to infrared energy by continuously conveying said food product through an infrared oven, wherein said food product is substantially surrounded laterally by infrared elements as said food product is conveyed through said infrared oven such that substantially all of said outer surface of said food product is directly irradiated with said infrared energy.

¹ Unitherm has represented to Cooper that it is not alleging infringement of claims 1-11, 16, and 33 of the '448 Patent. Dkt. # 61-2, at 54. Thus, only '448 Patent claims 12-15 and 17-32 are at issue here. In this section Court will reproduce only those claims that contain terms to be construed.

13. The process of claim **12** wherein said infrared oven further comprises a conveyor having a carrying run on which said food product is continuously conveyed through said infrared oven, said food product having a bottom portion residing on said carrying run and said conveyor being effective such that said bottom portion is directly irradiated with said infrared energy as said food product is conveyed on said carrying run.

21. The process of claim **12** wherein said food product has an internal core temperature and wherein substantially no increase in said internal core temperature occurs in said step of exposing.

22. A process for surface pasteurizing a food product which has already been cooked, said process comprising the step of exposing said food product to infrared energy by continuously conveying said food product through an infrared oven, wherein said infrared oven includes:

- a conveyor having a carrying run on which said food product is continuously conveyed through said infrared oven;
- a plurality of arched lateral upper infrared elements positioned over said carrying run; and
- a plurality of lower infrared elements positioned below said carrying run.

26. The process of claim **22** wherein said upper and said lower infrared elements substantially surround all of said food product laterally as said food product is conveyed through said infrared oven.

32. The process of claim **22** wherein said food product has an internal core temperature and wherein substantially no increase in said internal core temperature occurs in said step of exposing.

'448 Patent, col. 5, lns. 58-67; col. 6, lns 1-8, 34-49, 59-62; col. 8, lns 4-7.

II.

On April 7, 2010, the Court entered a Markman Order in Unitherm Food Systems, Inc. v. Foster Poultry Farms, Inc., Case No. 09-CV-0154-CVE-TLW, Dkt. # 69 (hereinafter Foster and the Foster Markman Order), in which certain terms in the '299 Patent were construed as follows:

1. “**Continuously heating**” was construed as: “**heating without interruption;**”
2. “**Continuously cooling**” was construed as: “**cooling without interruption;**”

3. **“Incidental heat loss”** was construed as: **“atmospheric or other ambient heat loss;”** and
4. **“Intervening cooling procedure”** was construed as: **“cooling of the product between step (a) and step (b) or between step (b) and step (c) that is not ‘incidental heat loss.’”**

The Foster Markman Order is incorporated herein.

III.

A patent consists of a specification, which includes a detailed description of the invention and the drawings, and one or more claims that appear at the end of the patent. “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 111, 1115 (Fed. Cir. 2004)). Determination of patent infringement is a two-step process. First, the court must construe the patent claims. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998); Strattec Sec. Corp. V. Gen. Auto. Specialty Co., 126 F.3d 1411, 1416 (Fed. Cir. 1997); Markman, 52 F.3d at 976. Second, the construed claims are compared to the allegedly infringing device or process.² E.g., Cybor Corp., 138 F.3d at 1454.

The words and phrases used in claims must be clear, exact, and precise. Claims must also “particularly point[] out” and “distinctly” claim the invention. 35 U.S.C. § 112. The claim requirements of 35 U.S.C. § 112 must be adhered to strictly for purposes of enabling the public to determine what subject matter is, and what subject matter is not, within the scope of the monopoly

² Courts must ignore the defendant’s allegedly infringing device or process when construing claim terms. Only after the claims have been properly construed without any consideration of the alleged infringement, may the construed claims be applied to the defendant’s device or process. SRI Int’l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1118 (Fed. Cir. 1985).

granted by the United States government. That subject matter which has not been made the subject of the patent monopoly is free territory to be practiced by everyone in the general public. The public is entitled to rely on the public record, apply the established rules of claim construction, ascertain the scope of the patent, and attempt to design around it. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed. Cir. 1996). Because the public relies on the claims, it is “unjust to the public, as well as an evasion of the law, to construe [claims] in a manner different from the plain import of [their] terms.” White v. Dunbar, 119 U.S. 47, 52 (1886) (quoted in Phillips, 415 F.3d at 1312).

The words of a claim are to be given their “ordinary and customary meaning,” which 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” Phillips, 415 F.3d at 1313; see also Vitronics, 90 F.3d at 1572; Innova, 381 F.3d at 1116. “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful.” Phillips, 415 F.3d at 1314. However, in cases where the intended meaning is not apparent, courts look to “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean,” Innova, 381 F.3d at 1116, including the patent specifications and the prosecution history. See ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368, 1374 (Fed. Cir. 2009); Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“[w]e cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history”) (quoting DeMarni Sports, Inc.

v. Worth, 239 F.3d 1314, 1324 (Fed. Cir. 2001)). The language, specifications, and prosecution history, collectively, are referred to as “intrinsic evidence.”

The patent specifications are relevant to claim construction because the claims are part of “a fully integrated written instrument.” ICU Medical, 558 F.3d at 1374 (quoting Phillips, 415 F.3d at 1315). “Thus not only is the written description helpful in construing claim terms, but it is also appropriate ‘to rely heavily on the written description for guidance as to the meaning of the claims.’” Id. (quoting Phillips, 415 F.3d at 1317). Although the specifications may be helpful in construing the terms of a claim, specifications do not necessarily limit claims’ scope if the claims are written in broad language. Innova, 381 F.3d at 1117 (“particular embodiments appearing in the written description will not be used to limit claim language that has broader effect . . . even where a patent describes only a single embodiment, claims will not be ‘read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope . . .’”) (quoting Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004)).

In certain circumstances, the preamble to a claim may limit that claim. Whether it does so is a “determination ‘resolved only on review of the entire[] . . . patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.’” Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989)). “In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim. Conversely, a preamble is not limiting ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’” Id. (internal citations omitted); see also Computer Docking Station

Corp. v. Dell, Inc., 519 F.3d 1366, 1375 (Fed. Cir. 2008) (“[i]n considering whether a preamble limits a claim, the preamble is analyzed to ascertain whether it states a necessary and defining aspect of the invention, or is simply an introduction to the general field of the claim”). The Federal Circuit has identified guideposts for determining when a preamble may limit a claim’s scope, including: Jepson format claims, see Jepson v. Coleman, 314 F.2d 533 (C.C.P.A. 1963) ;³ dependence on a disputed preamble phrase for antecedent basis; where the preamble recites additional structure or steps underscored as important by the specification; and clear reliance on the preamble during prosecution to distinguish prior art. Catalina, 289 F.3d at 808. However, “preambles describing the use of an invention generally do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure.” Id. at 809.

The prosecution history is relevant to claim construction because it “provides evidence of how the [United States Patent and Trademark Office] and the inventor understood the patent.” Phillips, 415 F.3d at 1317. Although it is “less useful [than the specifications] for claim construction purposes,” it “can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” Id. If the patentee unequivocally disclaimed a certain meaning during the patent approval process, the claim must be narrowed to exclude that meaning. Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir.

³ A Jepson format claim “first describes the scope of the prior art and then claims an improvement over the prior art.” Dow Chem. Co. v. Sumitomo Chem. Co., 257 F.3d 1364, 1368 (Fed. Cir. 2001). At the Markman hearing, Cooper’s counsel conceded that the ’299 and ’448 Patents did not contain Jepson format claims.

2005). This ensures that claims are not construed one way in order to gain approval and another way against accused infringers. Id.

Although the Federal Circuit has emphasized the importance of intrinsic evidence in claim construction, 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 1318 (quoting Markman, 52 F.3d at 980). “While extrinsic evidence ‘can shed useful light on the relevant art,’ . . . it is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” Id. (quoting C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)).

In the end,

there 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, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence. For example, a judge who encounters a claim term while reading a patent might consult a general purpose or specialized dictionary to begin to understand the meaning of the term, before reviewing the remainder of the patent to determine how the patentee has used the term. The 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.

Id. at 1323 (internal citations omitted).

IV.

The parties agree that the term “no substantial increase in said internal core temperature” in claim 7 of the ’299 Patent requires construction. Dkt. # 56. The Court hereby construes this claim as follows:

1. The term “**no substantial increase in said internal core temperature**” in claim 7 of the ’299 Patent⁴ is construed as: “**an increase in internal core temperature of no more than 1° F.**”

The parties agreed upon this construction. Dkt. # 56.

V.

Cooper identified additional terms that it argues require construction. Dkt. # 56. Unitherm argues that no additional terms require construction. *Id.* at 1. Applying the legal principles set forth above to the words and phrases submitted by Cooper for construction,⁵ the Court hereby construes certain terms in the claims of the Patents as follows:

A. Term in both the ’299 and ’448 Patents

1. The term “**surface pasteurizing**”⁶ in claim 1 of the ’299 Patent and claims 12 and 22 of the ’448 Patent is construed as: “**using heat for destroying bacteria on the surface.**”⁷ Cooper argues that this term should be construed as “heating already cooked food products in a manner effective to destroy bacteria on all of the outer surface of the already cooked food products without producing any substantial change in the color or other characteristics of the already cooked food products.”

⁴ The parties did not seek construction of the term “substantially no increase in said internal core temperature” claims 21 and 32 of the ’448 Patent. Dkt. # 56.

⁵ At the hearing, Cooper’s counsel represented that Cooper did not seek construction of those terms listed in the parties’ Joint Claim Construction Statement (Dkt. # 56) but not argued in their claim construction briefs.

⁶ Cooper argued that the term “method of surface pasteurizing” in the ’299 Patent and “surface pasteurizing” in the ’448 Patent required construction. Dkt. # 56, at 1-2. The ’448 Patent discusses a “process of surface pasteurizing.” The terms “method” and “process” do not require construction.

⁷ The Court finds that the terms in both Patents should be construed consistently. However, the Court would adopt the same construction if only one patent were at issue. Further, Cooper argues that its proposed construction of the term in the ’229 Patent “follows directly from Cooper’s construction . . . for ‘surface pasteurizing’ under the ‘448 Patent and for substantially the same reasons stated therein.” Dkt. # 61, at 26.

Dkt. # 61-2, at 30. Unitherm argues that this term does not require construction or, in the alternative, proposes “a process using heat for destroying bacteria which may be present on the surface of the cooked product.” Dkt. # 60, at 15.

Cooper’s proposed construction would introduce two limitations into the methods claimed in which “surface pasteurizing” is used in the preamble: first, a requirement that the methods be effective to destroy bacteria on all of a food product’s outer surface; and second, a requirement that the methods not produce any substantial change in the color or other characteristics of a food product. Nowhere in either of the Patents is it claimed that the inventive processes are effective to eliminate 100% of bacteria on a food product’s surface.⁸ In fact, the specifications discuss preferred embodiments wherein a 3, 4, or 6 log reduction in bacterial activity was achieved. ’299 Patent, col. 3, Ins. 61-62; ’448 Patent, col. 4, Ins. 60-61; ’448 Patent, col. 5, Ins. 1-2. If “surface pasteurization” required the complete elimination of all bacteria, then such embodiments would not be examples of the claimed inventions. Cooper cites no intrinsic or extrinsic evidence supporting its proposed requirement that surface pasteurization eliminate 100% of bacteria on a food product’s surface.

The summary of invention in the ’448 Patent states that “in its most preferred embodiments,⁹ the inventive system is effective for destroying bacteria without producing any substantial change in the color or other characteristics of the product.” ’448 Patent, col. 2, Ins. 25-28 (emphasis added).

The same section in the ’299 Patent states that “all of the steps of the inventive process are most

⁸ Cooper argues that the mention of the government’s “zero tolerance” requirements in the Patents’ specifications means that the inventions must kill 100% of bacteria. The “zero tolerance” requirement is for compliance with United States Department of Agriculture and Food and Drug Administration regulations regarding listeria monocytogenes and salmonella in ready-to-eat food products.

⁹ Cooper failed to include this first clause of the sentence when quoting the ’448 Patent in its brief. Dkt. # 70, at 14. Selective and misleading quotation is not helpful to any court.

preferably conducted in a manner such that substantially no change in surface color . . . occur[s].” ’299 Patent, col. 3, Ins. 3-7. These sentences necessarily imply that there are alternative or less preferable embodiments that are not identical. Throughout the Patents, references to a lack of change in color or other surface characteristics is discussed in the context of preferred or potential embodiments. E.g., ’448 Patent, col. 3, Ins. 14-20 (“the temperature and exposure period employed in the inventive process will most preferably be effective for achieving such results without producing any discernible change in the surface, color . . .”; ’448 Patent, col. 4, Ins. 8-18 (“other heating apparatuses . . . can also be used in the inventive process but are less desirable [because they] may change the surface color and other characteristics of the product’); ’299 Patent, col. 5, Ins 4-8 (“[t]o assist in preventing any change in surface color ... the packages fo cooked food product are preferably transferred from the hot water system **4** to the chiller **6** within not more than two minutes”). It would be improper to use these preferred embodiments to limit broader claim language. See Innova, 381 F.3d at 1117.

Further, Cooper’s proposed construction would render claim 16 in the ’448 Patent, “[t]he process of claim **12** wherein said step of exposing is conducted in a manner such that substantially no color change occurs in said outer surface,” ’448 Patent, col. 6, Ins. 16-19, entirely superfluous.

With respect to the ’448 Patent, Cooper argues that “the primary basis for distinguishing the invention from the prior art was its surface pasteurizing using continuous heating to destroy bacteria on the entire surface without altering the color or other characteristics of food products.” Dkt. # 70, at 12. The specification describes how “the current industry practices and procedures for dealing with [the problems of food-borne illness] are not sufficiently reliable and are inadequate to meet the zero tolerance requirements now imposed by regulatory agencies. . . . It is thus apparent that a need presently exists for a process which will consistently and effectively kill surface bacteria A

need particularly exists for such a process which will not alter the surface characteristics or internal characteristics of the products in any significant way.” ’448 Patent, col. 1, lns. 62-67, col. 2, lns. 1-16. Contrary to Cooper’s contention, the ’448 Patent specification does not distinguish prior art on the basis of whether surface characteristics are changed; it distinguishes prior art on the basis of the reliability and effectiveness of bacteria elimination. The same is true regarding Unitherm’s distinguishing of the Singh patent in the prosecution history. Although Unitherm described the Singh process as one “which significantly changes the color and other surface characteristics of the product,” Dkt. # 70-2, at 67, Unitherm did not explicitly distinguish the Singh process on this basis; rather, Unitherm distinguished Singh because it did not “discuss or suggest any packaging, cooling, or other steps following the browning procedure,” did not “suggest any adaptation or modification of the browning process whereby the browning process could be effectively used to produce browned packaged products which are adequately surface-pasteurized for sale,” and did not disclose or suggest a continuous infrared oven. *Id.* at 17. In the prosecution history, Unitherm did not expressly limit the claims in the ’449 Patent to processes that produced no substantial change in the color or surface characteristics of food products.

The parties’ proposed constructions of “pasteurization” are substantially similar to the Court’s construction.

B. Terms in the ’299 Patent

1. The term “**continuously heating said already cooked food products in a manner effective to take said outer surface to a temperature of at least 155° F**” in claim 1 is construed as: “**heating without interruption said already cooked food products in a manner effective to take said outer surface to a temperature of at least 155° F.**” In *Foster*, the Court construed the term “continuously heating” in the ’299 Patent as “heating without interruption.” Neither party disputes

that construction, and the Court finds no reason to deviate from it. However, Cooper’s proposed construction is “heating the already cooked food products without interruption in a manner effective to take all of the outer surface to a temperature of at least 155° F.” Dkt. # 61-2, at 30 (emphasis added). Cooper supports its insertion of the word “all” by asserting that the invention will not be effective if all of the outer surface is not heated to destroy bacteria. Dkt. ## 61, at 28; 70, at 7. However, Cooper cites no intrinsic or extrinsic evidence to support this assertion, and the Court finds no reason to read such a limitation into the claim.¹⁰

2. The term “**continuously heating said packages of said already cooked food products using water in a manner effective to take said outer surface to a temperature of at least 155° F**” in claim 1 is construed as: “**heating without interruption said packages of said already cooked food products using water in a manner effective to take said outer surface to a temperature of at least 155° F.**” This construction follows from the Court’s construction in Foster and the Court’s construction of the term “continuously heating said already cooked food products in a manner effective to take said outer surface to a temperature of at least 155° F,” ¶ V.B.1, supra.

3. The term “**continuously cooling said packages of said already cooked food products**” in claim 1 is construed as: “**cooling without interruption said packages of said already cooked food products.**” This is substantially the same as the parties’ proposed constructions, and is consistent with the Court’s construction of the term “continuously cooling” in Foster.

4. The term “**incidental heat loss**” in claim 1 is construed as: “**atmospheric or other ambient heat loss.**” This is identical to the Court’s construction of the term in Foster. Cooper’s proposed

¹⁰ Further, insertion of the word “all” would create confusion if, for instance, the surface of a food product was cracked. Under Cooper’s proposed construction, it is not clear whether the portion of the interior of the food product exposed by the crack would have to be heated to at least 155° F.

construction is “heat that is naturally lost from the outer surface of the already cooked food products to the atmosphere or other ambient surroundings.” Dkt. # 61-2, at 30. Cooper proposes the inclusion of the modifier “naturally” to distinguish “incidental heat loss” from an “intervening cooling procedure.” During the Foster Markman hearing, the Court stated that an intervening cooling procedure would “remove heat other than naturally.” Dkt. # 70-2, at 41. However, the Court did not include the word “naturally” in its final construction of either “incidental heat loss” or “intervening cooling procedure” because the term is unnecessary and confusing. Heat is “naturally” lost even during an intervening cooling procedure insofar as heat is lost according to the laws of physics, which are “natural.” Further, it could be argued that heat that is lost while a product is conducted on a conveyor belt is not lost “naturally” because it is not “natural” for food products to travel on a conveyor belt. The Court finds no reason to deviate from its previous construction or to add additional modifiers.

. The term “**intervening cooling procedure**” in claim 1 is construed as “**cooling of the product between step (a) and step (b) or between step (b) and step (c) that is not ‘incidental heat loss.’**” Cooper’s proposed construction is “any cooling of the already cooked food products between step (a) and step (b) or between step (b) and step (c) that is not incidental heat loss. Dkt. # 61-2. Cooper’s proposed construction does not differ materially from the Court’s construction in Foster, and the Court finds no reason to deviate from it.

C. Terms in the ’448 Patent

1. The term “**exposing said food product to infrared energy**” in claims 12 and 22 requires no construction. Cooper’s proposed construction is “heating all of the outer surface which surrounds the food product by exposing the food product to infrared energy.” Dkt. # 61-2, at 28. Unitherm

argues that this term does not require construction or, in the alternative, proposes “exposing the food product to radiant energy in the infrared range.” Dkt. # 60, at 22.

Again, Cooper attempts to read a limitation into the claims by requiring that all of the outer surface be exposed to infrared energy. This would directly contradict further language in claim 12, which describes a process for surface pasteurizing by continuously conveying a food product through an infrared oven “such that substantially all of said outer surface of said food product is directly irradiated with [] infrared energy.” ’449 Patent, col. 5, lns. 65-67 (emphasis added). “Substantially all” simply does not mean “all.” The Court will not read the modifier “substantially” out of the claim. Further, Cooper’s proposed construction would render the method of claim 22 impossible. Claim 22 is for a method of surface pasteurizing a food product by exposing it to infrared energy by continuously conveying said food product on a carrying run through an infrared oven. Id. at col. 6, lns. 38-43. The portion of the product’s surface that rests on the carrying run would not be exposed to infrared energy. Therefore, “exposing said food product to infrared energy” cannot mean “exposing all of the food product to infrared energy.”

The Court further finds that the term “infrared energy” does not require construction.

2. The term “**substantially surrounded laterally by infrared elements**” in claim 12 is construed as: “**substantially surrounded latitudinally by infrared elements.**” Cooper’s proposed construction is “substantially surrounded on all sides.” Dkt. # 61-2, at 28. Unitherm argues that this term does not require construction or, in the alternative, proposes “substantially surrounded from side to side by infrared elements.” Dkt. # 60, at 23.

Cooper's suggestion that "surrounded laterally" means "surrounded on all sides" is impracticable.¹¹ If a food product were surrounded on all sides by infrared elements its exit from a continuous oven would be blocked. At the Markman hearing, the parties agreed that "latitudinally" was an appropriate synonym for "laterally" in this case. From the nature of the inventive process and the drawing sheets, it is clear that the term is meant to refer to heating elements that are oriented along planes perpendicular to the food product's direction of travel.

The Court further finds that the term "infrared elements" does not require construction.

3. The term "**a plurality of arched lateral upper infrared elements positioned over said carrying run**" in claim 22 is construed as: "**more than one arched upper infrared elements oriented latitudinally and positioned over said carrying run.**" Cooper's proposed construction is "two or more infrared elements forming an arch over and situated at the sides of the carrying run." Dkt. # 61-2, at 28. Unitherm argues that this term does not require construction or, in the alternative, proposes "more than one infrared element which has an arched curvature and is positioned crossways over the carrying run." Dkt. # 60, at 23.

"More than one" and "two or more" have the same meaning.¹² Cooper's proposed construction would limit the shape of the upper infrared elements because it would essentially require that they form an inverted "U" shape, in that it requires the infrared elements to have "legs." See Dkt. # 70, at 23. There is no intrinsic or extrinsic evidence to support such a limitation.¹³ Cooper cites to one preferred embodiment described in the '448 Patent wherein "the inverted, U-

¹¹ Further, Cooper's proposed construction is at odds with its own proffered dictionary definition of the word "laterally," which is "of, relating to, or situated at or on the side." Dkt. # 61, at 25 (emphasis added).

¹² It is not possible to have a fraction of an infrared element.

¹³ Not all arches have legs, for example: parabolas and certain vaulted or gothic arches.

shaped upper infrared elements **10** desirably surround . . . the products.” ’448 Patent, col. 4, lns. 44-46. This is clearly a description of one preferred embodiment and not a limitation on the patent claims. Further, Cooper’s proposed construction would render claim 23, “the process of claim **22** wherein said arched lateral upper infrared elements have an inverted U-shape,” ’449 Patent, col. 6, lns. 50-51, superfluous.

The Court also finds that the term “arched curvature” is no more clear than the term “arched,” and that a jury would be able to understand the term “arched.”

The replacement of “lateral” with “oriented latitudinally” follows from the Court’s construction of “laterally,” ¶ V.C.2, supra.

4. The term “**substantially surround all of said food product laterally**” in claim 26 is construed as “**substantially surround all of said food product latitudinally**.” Cooper’s proposed construction is “substantially surrounded on all sides.” Dkt. # 61-2, at 28. Unitherm argues that this term does not require construction or, in the alternative, proposes “substantially surround the food product from side to side.” Dkt. # 60, at 24. The Court’s construction follows from the construction of “laterally,” ¶ V.C.2, supra.

IT IS SO ORDERED this 4th day of June, 2010.


CLAIRE V. EAGAN, CHIEF JUDGE
UNITED STATES DISTRICT COURT