United States District Court, N.D. Texas, Dallas Division.

## LINCOLN FOODSERVICE PRODUCTS LLC,

Plaintiff.

v.

# TURBOCHEF TECHNOLOGIES, INC,

Defendant.

Civil Action No. 3:07-CV-1707-N

Nov. 7, 2008.

Scott W. Breedlove, Allen W. Yee, Vinson & Elkins LLP, Dallas, TX, David M. Stein, Fay E. Morisseau, McDermott Will & Emery LLP, Irvine, CA, for Plaintiff.

John Morant Cone, Kelly J. Kubasta Hitchcock Evert LLP, Dallas, TX, Carolyn Passen, Eric C. Cohen, Jeremy C. Daniel, Michael A. Dorfman, Timothy J. Vezeau, Katten Muchin Rosenman LLP, Chicago, IL, for Defendant.

## **ORDER**

DAVID C. GODBEY, District Judge.

This Order addresses the construction of disputed claim terms of U.S. Patent No. 6,817,283 B2 (the "'283 Patent" or "Patent"), pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). Having reviewed the relevant intrinsic and extrinsic evidence in the record, the Court construes the disputed terms and phrases as provided below.

## I. FACTUAL AND PROCEDURAL BACKGROUND

Plaintiff Lincoln Foodservice Products LLC ("Lincoln" or "Patentee") brought this patent infringement action, alleging that Defendant TurboChef Technologies, Inc.'s ("TurboChef") "Tornado" oven infringes the '283 Patent. TurboChef brought a counterclaim, seeking a declaratory judgment that neither the Tornado nor TurboChef's other ovens infringe any claims of the '283 Patent and that the Patent is invalid. The Patent generally discloses a cooking device and a method for cooking using air impingement to cook food products rapidly. The three disputed claims this Order addresses all additionally require the use of apertures shaped to provide "different BTU delivery rates at different levels" within a blanket of impingement air.

#### II. CLAIM CONSTRUCTION STANDARDS

Claim construction is a question of law for the Court. *See* Markman, 517 U.S. at 391. In construing the claims of a patent, the words comprising the claims "are generally given their ordinary and customary meaning" as understood by "a person of ordinary skill in the art in question at the time of the invention."

Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed.Cir.2005) (en banc). Accordingly, courts must determine the meaning of claim terms in light of the resources a person with such skill would review to understand the patented technology. *See* id. at 1313 (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed.Cir.1998)). First, "the person of ordinary skill in the art is deemed to read the claim term ... in the context of the entire patent, including the specification." *Id.* If the specification "reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess ...., the inventor's lexicography governs." Id. at 1316. Likewise, if "the specification ... reveal[s] an intentional disclaimer, or disavowal, of claim scope by the inventor .... [,] the inventor's intention, as expressed in the specification, is regarded as dispositive." *Id.* 

In addition to the specification, courts must examine the patent's prosecution history-that is, the "complete record of the proceedings before the PTO and includ[ing] the prior art cited during the examination of the patent." *Id.* at 1317. "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* In particular, courts must look to the prosecution history to determine "whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.* "[W]here the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed.Cir.2003).

Finally, in addition to evidence intrinsic to the patent at issue and its prosecution history, courts may look to "extrinsic evidence, which 'consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.' "Phillips, 415 F.3d at 1317 (quoting *Markman*, 517 U.S. at 980). In general, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* at 1318.

## III. CONSTRUCTION OF DISPUTED TERMS

The disputed claim terms of the '283 Patent call for apertures of a particular "cross-section shape." TurboChef contends the shape of the aperture cross-sections described in each claim is limited to specific shapes such as dog bone, jack, and starburst-excluding circular, rectangular, and cross shapes. Lincoln contends the claims encompass these and all other potential cross-section shapes. Based on the Court's review of the relevant intrinsic and extrinsic evidence in the record, the Court construes the disputed terms and phrases of the Patents as follows:

# A. Construction of "Cross-Section Shape" in the '283 Patent's Disputed Means-Plus-Function Claim 38

The parties agree that the following language from claim 38 of the '283 Patent constitutes a means-plus-function claim:

A cooking device comprising means that includes a plurality of jet apertures for providing columns of impingement air that form a blanket of impingement air for cooking food products of different heights without adjustment of the distance between said jet apertures and said food products, and wherein said [j]et apertures have a cross-section shape which provides different BTU delivery rates at different levels within said blanket of impingement air.

'283 Patent at col. 19, ll. 41-48. The parties disagree on which portions of the quoted language constitute the claimed function and whether the phrase "cross-section shape which provides different BTU delivery rates

at different levels" or the phrase "without adjustment of the distance" adds anything to the substance of the claim or merely states the result of limitations in the claim. FN1 In the context of this claim, the Court construes the term "cross-section shape" to exclude circular, rectangular, and cross shapes, as well as any other cross-section shapes that fail to provide different BTU delivery rates at different levels within a blanket of impingement air, and thereby require adjustment of the distance between the apertures and food products of different heights.

FN1. Citing Lockheed Martin Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1319 (Fed.Cir.2003), Lincoln argues that the claimed function is to "form a blanket" and that the phrase "without adjustment of the distance" merely states the result of the function. *See* Lincoln Opening Cl. Constr. Br. at 15-16. However, Lincoln overlooks the plain meaning of the phrases constituting the claim. "[F]orm[ing] a blanket" is part of the means or method of achieving the function or objective of "cooking ... without adjustment." *See* '283 Patent at col. 19, ll. 43-44.

The first step in construing claim 38 is to determine what constitutes the claimed function. *See* Med. Instrum. & Diagnostics v. Elekta AB, 344 F.3d 1205, 1210 (Fed.Cir.2003) (citing Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed.Cir.1999)). The ordinary grammatical construction of claim 38 reveals that its function is "cooking food products of different heights without adjustment of the distance between [apertures and food products]." *See* '283 Patent at col. 19, Il. 43-45. The adjective phrase "without adjustment ..." modifies and is a logically inseparable limitation on the noun phrase, "cooking food products...." The Federal Circuit provides additional support for this construction in *Lockheed Martin Corp*. *v. Space Systems/Loral, Inc.*, where it explained that the function in a means-plus-function claim was "properly identified as the language after the 'means for' clause and before the 'whereby' clause." FN2 324 F.3d 1308, 1319 (Fed.Cir.2003) (citing Tex. Instrums. Inc. v. U.S. Int'l Trade Comm'n, 988 F.2d 1165, 1172 (Fed.Cir.1993)). In *Lockheed*, the court identified the function as the noun phrase and its modifying adjective phrase that were located between the claim's "means for" clause and its "whereby" clause. *See id*. Likewise, the function in claim 38 is the noun phrase between its "means for" clause and its "wherein" clause.

FN2. Lincoln makes much of the next part of this sentence, which reasons that "a whereby clause that merely states the result of limitations in the claim adds nothing to the substance of the claim." See Lincoln Opening Cl. Constr. Br. at 15-16 (citing Lockheed, 324 F.3d at 1319). Lincoln's reliance on this reasoning to argue that the '283 Patent's apertures need not "have a cross-section shape which provides different BTU delivery rates at different levels" is misplaced. See '283 Patent at col. 19, 11. 46-48. In Lockheed, the Federal Circuit was referring to a specific type of "whereby" clause-one that merely states the result of claim limitations. The natural corollary of this statement is that a "whereby" cause that does more than merely state the result of limitations in fact does add something to its substance. It is unclear how important this distinction is in this case because the Court's construction of claim 38 turns primarily on the fact that only certain cross-section shapes can achieve the function of "cooking ... without adjustment." As the Court explains, the reason this is true is because other cross-section shapes provide similar BTU delivery rates at different levels, a feature whose exclusion claim 38 suggests. TurboChef also makes a strong argument that the prosecution history points out the wherein clause's substantive contribution to the claim. See TurboChef Opening Cl. Constr. Br. at 25-27 (demonstrating that the "wherein" clause was the only change between rejected application claim 48 and issued claim 38). Ultimately, Lincoln is also incorrect that the "without adjustment" language states the result of the claim's function. The language forms an adjective phrase that specifically describes the function. See Lincoln Opening Cl. Constr. Br. at 15-16, 21. Considering its part of

speech, it is impossible to construe it as a result (which would be a noun), as Lincoln proposes. Furthermore, Lincoln's comparison of this phrase to the "whereby" clause in *Lockheed* is inapposite. *See id*. at 15. The "wherein" clause in Claim 38 may plausibly be likened to the "whereby" clause in *Lockheed*. The "without adjustment" phrase cannot.

The second step in construing claim 38 is to identify the function's corresponding structure, i.e. determine its stated scope. See Elekta, 344 F.3d at 1210 (citing Micro Chem, 194 F.3d at 1258). The claim language itself and specific examples provided in the specification and their equivalents limit the scope of a means-plusfunction claim. See 35 U.S.C. s. 112, para. 6 ("An element in a claim ... expressed as a means or step for performing a specified function without the recital of structure ... shall be construed to cover corresponding structure, material, or acts described in the specification and equivalents thereof."); Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed.Cir.2002) ("It is ... improper to broaden the scope of the claimed function [in a means-plus-function claim] by ignoring clear limitations in the claim language."); Micro Chem., 194 F.3d at 1258 (explaining that Section 112, para. 6 does not support a structural interpretation that is broader than necessary to perform the claimed function). Claim 38 contains two related limitations. First, the function is self-limiting: any corresponding structure must cook food products of different heights "without adjustment of the distance between [apertures and food products]." '283 Patent at col. 19, ll. 44-45. According to the specification, a structure with circular-, rectangular-, or cross-shaped cross-sectional apertures would require "vertical adjustment" to cook food products of different heights. '283 Patent at col. 13, 11. 51-63. If vertical adjustment is required, the structure cannot perform the stated function, which is "cooking ... without adjustment." Second, claim 38 describes the "apertures" as "hav[ing] a cross-section shape which provides different BTU delivery rates at different levels." '283 Patent at col. 19, 11. 46-48. According to the '283 Patent's specification, apertures of certain cross-section shapes, such as dog-bone, jack, and starburst, provide truly different BTU delivery rates at different levels. '283 Patent at col. 14, ll. 22, 46, 65. This structure achieves-and thereby corresponds to-the claimed function. On the other hand, a structure with circular-, rectangular-, or cross-shaped aperture cross-sections provides "a very narrow range of BTU delivery rates" at different levels.FN3 '283 Patent at col. 13, 1.55. It is as a result of this very narrow range that the distance must be adjusted between apertures that use these cross-section shapes and food products of different heights.FN4 Because adjustment is required, cross-sections of these shapes are not encompassed in the scope of claim 38.

FN3. While the specification states that circular-, rectangular-, and cross-shaped cross-section provide BTU delivery ranges of 1.39 BTU/lbm, 1 BTU/lbm, and 2 BTU/lbm respectively, these ranges are "similar" as opposed to "different." *See* '283 Patent at col. 13, ll. 54-57, 64-67. Lincoln argues that these ranges are different because they are not the same. *See* Lincoln Opening Cl. Constr. Br. at 19. However, the Court notes that the word "different" is an antonym of both the words "same" and "similar ." *See* RANDOM HOUSE WEBSTER'S UNABRIDGED DICTIONARY 1697, 1782 (2d ed.2001). Given the inventor's intention, as expressed in the context of the specification, while these BTU delivery rates may not be exactly the same, they are so similar that they are not "different" for the purpose of construing the claims in this Patent.

FN4. Although the '283 Patent specification only states as an "example" that vertical adjustment would be required when using circular cross-sections, the reason the specification offers for this requirement-a narrow BTU delivery rate range-also applies when using rectangular- and cross-shaped cross-sections, which have an equally narrow range and would also necessitate vertical adjustment. *See* '283 Patent at col. 13, Il. 55-61.

Although Lincoln seems to imply that the words "plurality" and "array" of apertures in the Patent and its specification modify the term "cross-section shape," this contention finds no support in the structure of the claim itself. *See* Lincoln Opening Cl. Constr. Br. at 16-17, 23. The plain language of claim 38 describes a "plurality of jet apertures," not a "plurality of cross-section shapes." '283 Patent at col. 19, ll. 41-42. The singular (as opposed to plural) term "cross-section shape" does not even appear until the end of claim 38-nowhere near the term "plurality" and explicitly relating back to "said apertures" or "said jet apertures." *See* '283 Patent at col. 19, l. 30; col. 20, l. 46.

Lincoln also argues that apertures of certain cross-section shapes, including circles, are merely preferred embodiments and that it would be improper to exclude less-preferred shapes, presumably rectangles and crosses, from the scope of claim 38. *See* Lincoln Resp. Cl. Constr. Br. at 15-17 (citing Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1379 (Fed.Cir.2002); Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 865 (Fed.Cir.1988)). On the contrary, as the Court discusses *supra* p. 7, circular-, rectangular-, and cross-shaped aperture cross-sections fail to achieve the very function the '283 Patent requires. The ability of its shape to achieve that function is prerequisite to any cross-section that falls within the scope of claim 38. If the shape does not achieve the claimed function, it is neither a preferred nor a less-preferred embodiment.

Additionally, Lincoln's thorough criticism of cross-section shapes with a narrow range of BTU delivery rates (namely circular, rectangular, and cross shapes) is equivalent to disavowal of those shapes from the scope of the '283 Patent's claims. *See* Honeywell Int'l, Inc. v. ITT Indus., Inc., 452 F.3d 1312, 1320 (Fed.Cir.2006) ("[A patentee's] repeated derogatory statements concerning one type of material are the equivalent of disavowal of that subject matter from the scope of the patent's claims."); Astrazeneca AB v. Mut. Pharm. Co., 384 F.3d 1333, 1340 (Fed.Cir.2004) ("Where the general summary or description of the invention describes a feature of the invention ... and criticizes other products ... that lack that same feature, this operates as a clear disavowal of these other products (and processes using these products.)"). In describing "[t]he particular cross-sectional shapes" that "provide a range of BTU delivery rates," the specification explicitly contrasts these preferred shapes with other shapes characterized by "a very narrow range of BTU delivery rates," "delivery rates ... so close together," and "a noticeable drop in air velocity from the center towards the circumference or the ends." '283 Patent at col. 13, ll. 18-19, 32-47, 55, 57; col. 14, ll.1-3. The specification further criticizes and disavows rectangular and cross shapes, calling them "narrow and difficult to use." '283 Patent at col. 14, ll. 6-7.

Ultimately, the Court construes the term "cross-section shape" in claim 38 to exclude circular, rectangular, and cross shapes, as well as any other aperture cross-section shapes that fail to provide substantively different BTU delivery rates at different levels within a blanket of impingement air. The Court declines to go beyond this construction to adopt TurboChef's proposed requirement that the aperture cross-section shape must include "at least one web like member that has at least one enlarged area along the length thereof." *See* TurboChef Opening Cl. Constr. Br. at 27. Section 112, para. 6 limits means to those disclosed in the specification and their equivalents. Whether any particular shape is an equivalent to those disclosed in the specification is an infringement question, not a claim construction question.

# B. Construction of "Cross-Section Shape" in the '283 Patent's Disputed Method Claims 35 and 54

Like claim 38, claims 35 and 54 also require apertures that "have a cross-section shape which provides

different BTU delivery rates at different levels within [a] blanket of impingement air." '283 Patent at col. 19, ll. 30-32; col. 20, ll. 46-49. As discussed with respect to claim 38, supra p. 7, only certain cross-section shapes provide different BTU delivery rates at different levels. As a result, in the context of these claims, the Court also construes the term "cross-section shape" to exclude other shapes, including circular, rectangular, and cross shapes, because they fail to provide different BTU delivery rates at different levels within a blanket of impingement air.

TurboChef also argues that prior art, namely U.S. Patent No. 4,591,333 A (the "Henke Patent"), precludes circular-shaped aperture cross-sections-the only shape used in the Tornado oven-and that Lincoln expressly disclaimed circular-shaped cross-sections during the '283 Patent's prosecution. *See* TurboChef Opening Cl. Constr. Br. at 16-20, 28-29. Because the Court has determined that circular-shaped aperture cross-sections do not fall within the purview of the claim language itself, it is unnecessary for the Court to address this alternative ground for TurboChef's proposed claim construction.

## **CONCLUSION**

Having reviewed the relevant intrinsic and extrinsic evidence in the record, the Court construes the disputed terms of the Patents as provided above.

N.D.Tex.,2008.

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