United States District Court,
W.D. Missouri, Southern Division.

CUSTOM METALCRAFT, INC,
Plaintiff/Counter-Defendant.
v.
HOOVER MATERIALS HANDLING GROUP, INC,
Defendant/Counter-Claimant.

No. 05-3174-CV-S-RED

Jan. 9, 2007.

Scott R. Brown, Jennifer Christine Bailey, John M. Collins, Hovey Williams LLP, Kansas City, MO, for Plaintiff/Counter-Defendant.

Jeffrey J. Simon, Husch & Eppenberger, LLC, Kansas City, MO, Robert C. Haldiman, Husch & Eppenberger, St. Louis, MO, Ginger K. Gooch, Husch & Eppenberger, Springfield, MO, for Defendant/Counter-Claimant.

ORDER

RICHARD E. DORR**, District Judge.**

Plaintiff Custom Metalcraft, Inc. filed a complaint against Defendant Hoover Materials Handling Group, Inc. alleging infringement of its United States Patent No. 5,718,351 ("'351 patent"), entitled "Flat Bottom Tank." Defendant answered the complaint and asserted two counterclaims alleging the patent is invalid and not infringed.

On November 22, 2006, the Court held a *Markman* hearing at which the parties presented oral argument as to the proper construction of the disputed claim language in the claims at issue. The parties also submitted several briefs and proposed claim constructions to the Court. Upon consideration of the oral argument and written briefs, the Court's construction of the disputed claim language follows.

I. ***Legal Standard for Claim Construction***

Claim construction of a patent is a question of law and thus exclusively within the province of the court. Markman v. Westview Instruments, 517 U.S. 370, 372 (1996). In construing the claims of a patent, the court should look first at the claim language itself. Claim terms are generally to be given their ordinary and customary meaning, that 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 v. AWH Corp., 415 F.3d 1303, 1313 (Fed.Cir.2005) (en banc). The person of ordinary skill in the art, however, is deemed to have read the claim term not only in the context of the particular claim in which it appears, but also in the context of the entire patent, including

the specification. *Id*. Thus, when construing the claim terms, the court considers all the intrinsic evidence-the claims, the specification, and the prosecution history FN1-that would be available and reviewed by one skilled in the art. *See id*.

FN1. Here, the claims of the '351 patent were allowed by the Patent and Trademark Office as filed, thus the prosecution history provides no insight on the construction of the disputed claim language. The Court will focus its review on the claims and specification.

Often, the ordinary meaning of claim language may be readily apparent. In such cases, claim construction "involves little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314. General purpose dictionaries FN2 are helpful in these instances in ascertaining the common usage of certain terms. Id. Claims, however, " 'must be read in view of the specification, of which they are a part.' " Id. at 1315 (quoting Markman v. Westview Instruments, 52 F.3d 967, 979 (Fed.Cir.1995)). The specification, then, is highly relevant to the claim construction analysis and is considered " 'the single best guide to the meaning of a disputed term.' " *Id*. (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996)).

FN2. The Court relies on the Oxford English Dictionary for all dictionary definitions provided in this Order.

Apart from the intrinsic evidence, courts may also consider extrinsic evidence-" 'all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises' "-in its claim construction analysis. *Id*. at 1317 (quoting Markman, 52 F.3d at 980). Extrinsic evidence, however, is considered to be less significant and less reliable than the patent and its prosecution history in determining how to construe claim terms. *Id*. at 1317-18.

II. ***Claim Construction***

A. ***Independent Claims 1 and 13***

The '351 patent includes two independent claims, claims 1 and 13, which read as follows:

1. A method of forming the bottom of a tank for liquids, said tank having generally upwardly extending sides, comprising the steps of:

a) providing a square or rectangular shaped bottom plate member having a plurality of sides and corner portions;

b) forming said bottom plate to provide a raised center portion which slopes downwardly towards said sides;

c) breaking each of said sides upwardly to form side wall portions having substantially vertical upwardly extending wall portions, said side wall portions also having sloped bottom wall portions which slope downwardly from said vertical upwardly extending wall portions to meet said center portion of the tank bottom and thereby form a line of flow, said line of flow extending around the perimeter of said center portion and having a downward slope extending from a first one of said corner portions to a second one of said corner portions, said second corner being located diagonally opposite said first corner; and

d) forming a drain outlet in the bottom wall portion of one of the side wall portions adjacent said second corner.

13. A portable tank for liquids, said tank having generally upwardly extending sides and a bottom head which provides for complete drainage of liquid from the tank, wherein said bottom head comprises a one-piece construction formed from a square or rectangular shaped bottom plate member having a plurality of sides and corner portions, said plate member having a raised center portion which slopes downwardly towards said sides; the sides of the plate member being broken upwardly to form side wall portions having substantially vertical upwardly extending wall portions, said side wall portions also having sloped bottom wall portions which slope downwardly from the vertical upwardly extending wall portions to meet the center portion of the tank bottom and thereby form a line of flow, said line of flow extending around the perimeter of the center portion and having a downward slope extending from a first of one of the corner portions to a second one of the corner portions, said second corner being located diagonally opposite said first corner; and with a drain outlet formed in the bottom wall portion of one of the side wall portions adjacent said second corner.

'351 patent, col 3, ll. 28-24; col. 4, 11. 22-44.

Much of the disputed claim language appears in both independent claims. Because terms are generally to be given the same meaning when used in different claims, *see* Innova/Pure Water v. Safari Water Filtration Sys., 381 F.3d 1111, 1119 (Fed.Cir.2004), the Court will discuss and construe the disputed language as it appears in both claims.

1. "*Forming*" *and* "*Formed*"

The first disputed term is "forming" as used in claim 1 or "formed" as used in claim 13. As used in the claims, the Court finds the term has its ordinary and accepted meaning "to give form or shape to." This definition of the term is supported by the specification. The specification states that "[t]he tank bottom of the present invention may be flat stamped or swedged in accordance with procedures known in the art. Thus the bottom head can be made in different sizes by stamping or swedging of material in a press with dies." '351 patent, col. 2, ll. 8-12. While the specification suggests the bottom head may be made in a press with dies, neither the specification nor the claims expressly limits how the bottom head is to be formed. Thus, "forming" and "formed" are not defined to include any limitation as to the type of tool used.

2. "*Breaking*" *and* "*Broken*"

Defendant argues the terms "breaking" and "broken" found in claims 1 and 13 should be construed to mean "shaped with a brake press." This definition is not supported by the claim language or specification. Reading the claim language as a whole, the terms "breaking" and "broken" suggest the plane of the bottom plate is broken or "bent" to form side wall portions. This definition is consistent with the fact that "breaking" in claim 1 is listed as one of the steps in the method of forming the bottom head; the breaking step is not a separate process or operation, but part of the overall forming process. To adopt Defendant's definition would be to import an additional operation into the process of forming the bottom head. Thus, the Court finds the proper construction of "breaking" and "broken" is "to bend or the process of bending."

3. "*A raised center portion which slopes downwardly towards said sides*"

Claims 1 and 13 both claim "a raised center portion which slopes downwardly towards said sides." '351

patent, col. 3, ll. 33-34; col. 4, ll. 28-29. Plaintiff argues this language should be construed to mean a portion of the center tank must be raised above the tank bottom to create a slope in the direction of all sides of the tank bottom. Defendant argues the raised center portion cannot mean a center having any shape whatsoever, and specifically cannot include a circular dome-shaped center portion. Defendant bases its argument on the maxim that claims should be construed to preserve their validity; according to Defendant, if the claims are construed to include circular dome-shaped center portions, the claims would read on prior art and would be invalid.

The Court is aware of the principle that claims should be construed to preserve their validity; however, this principle is not broadly applied. Phillips, 415 F.3d at 1327. Instead, this principle is employed as a final measure and is limited to circumstances when a court exhausts all of its tools of claim construction and still finds the claim language to be ambiguous. *Id*. This is not such a case. The Court finds nothing ambiguous about the term "raised center portion." Taking together the ordinary and customary meaning of each term-"raised" to mean "lifted up, at a higher level, or elevated"; "center" to mean "the point at equal distance from the extremities of any regular surface"; and "portion" to mean "a part or section"-the Court finds "raised center portion" means a section of the center of the tank bottom must be elevated above the rest of the tank bottom. "Raised center portion" is not limited to any particular shape or geometry. Further, the Court finds "which slopes downwardly towards said sides" means the raised center portion must slope or slant downward in the direction of all sides of the tank bottom.

4. "*Sloped bottom wall portions which slope downwardly*"

Claims 1 and 13 state in pertinent part: "said side walls also having sloped bottom wall portions which slope downwardly from said vertical upwardly extending wall portions." '351 patent, col. 3, ll. 37-39; col. 4, ll. 31-34. Defendant contends this language suggests the slope in the bottom wall portions substantially extends the entire length of each of the side walls. Plaintiff argues there is nothing in the claim or the specification to support Defendant's position.

The Court agrees with Defendant's construction. The Court's conclusion is based on the use of "sloped" as an adjective modifying "bottom wall portions." By using "sloped" to describe "bottom wall portions," the claim language suggests that a slope or slant is a descriptive attribute of the bottom walls. If instead only certain sections of the bottom wall portions were to be sloped, the term "sloped" would not have been an appropriate modifier in defining the bottom walls. The claim could simply have read "bottom wall portions parts of which slope downwardly." There is nothing in the specification to indicate this construction is improper. In fact, to achieve the line of flow described in the abstract and specification, it is necessary to have the slope in the bottom wall extend substantially the entire length of each side. Plaintiff points out that there is no such downward slope adjacent to the drain; however, the drain represents the end of the line of flow, and a common sense interpretation of this description would allow that the slight exception for the drain does not call for the construction urged by Plaintiff. Therefore, the Court finds "said side walls also having sloped bottom wall portions which slope downwardly from said vertical upwardly extending wall portions" means all of the side walls of the tank bottom have bottom wall portions which have a slope or slant that extends the length of the side walls, and these bottom wall portions are sloped or slanted downward from the upright walls of the tank.

5. "*Line of flow*"

Much of the dispute between the parties centers around the claim language describing the tank bottom line of flow. In particular, claims 1 and 13 state:

[having sloped bottom wall portions slope downwardly] to meet said center portion of the tank bottom and thereby form a line of flow, said line of flow extending around the perimeter of said center portion and having a downward slope extending from a first one of said corner portions to a second one of said corner portions, said second corner being located diagonally opposite said first corner.

'351 patent, col. 3, ll. 39-46; col. 4, ll. 33-41.

First, the parties dispute what constitutes a line of flow. Plaintiff contends the line of flow is the intersection of the downward slope of the raised center portion and the sloping bottom wall portions. Defendant argues the line of flow is more than an intersection and proposes "line of flow" should be construed to mean a canal or gutter which constrains and directs the flow of liquid on two sides.

In summarizing the invention, the specification describes the formation of the line of flow as follows: "The bottom head extends downwardly from the sides to intersect the planar surfaces sloping downwardly from the center of the bottom head and thereby form a line of flow which, together with the intersecting planar surfaces, defines a canal for directing the flow of liquids." '351 patent, col. 1, ll. 23-28. In the description of the preferred embodiment, it further defines the line of flow as "basically the intersection of two smoothly contoured planar surfaces defining a canal which extends around the periphery of the tank bottom, with no cut channel or indentation which would interfere with the flow of liquids." '351 patent, col. 1, l. 67, col. 2, ll. 1-3. At the *Markman* hearing, Plaintiff pointed to this latter language to support its position that the line of flow is not a defined channel, but did concede that the patent describes the line of flow as a canal.

As defined, "canal" means "a water-course or channel." Thus, a canal necessarily implicates a channel defined to constrain and direct liquid. With that definition, the Court believes "line of flow" represents more than the mere intersection of the bottom walls portions and the raised center portion. The Court construes the line of flow to be a defined canal or channel that is formed by the intersection of the sloped raised center portion and the sloped bottom wall portions; the line of flow serves as a channel to constrain and direct the flow of the liquid. Morever, as discussed below, not only does the canal have sides to define the line of flow, but it also, necessarily, has a downward slope built into it that creates the flow.

The parties next dispute the orientation of the line of flow. At the hearing, Plaintiff argued the language "extending around the perimeter of the raised center portion" necessarily means the raised center portion has a defined perimeter or a line bounding it and that the line of flow follows that perimeter. The specification defines the path of the line of flow as extending "circumferentially around the interior of the tank bottom." '351 patent, col. 1, ll. 28-29. The ordinary and customary definition of "perimeter" is "a continuous line forming the boundary of a closed geometrical figure or of any area or surface; a circumference; a periphery, outline." The ordinary and customary meaning of perimeter is thus in accord with the specification, and the Court construes the perimeter to be the boundary or outline of the raised center portion defined by the intersection of the sloped raised center portion and the sloped bottom wall portions. As stated in the claims, the line of flow continues along this boundary.

An area of even greater dispute is the claim language defining the slope of the line of flow. Plaintiff argues the claim language should be construed to mean the line of flow is higher in elevation near one corner of the tank and lower in elevation near a diagonally opposite corner of the tank. Plaintiff contends the patent is silent as to how the slope is accomplished; according to Plaintiff, the slope can be created either through the process of forming the slope into the line of flow or by attaching uneven legs to slope the entire bottom

head. Defendant strenuously opposes Plaintiff's position that the slope can be accomplished through the use of uneven legs, and instead argues the slope from one corner to a diagonal corner must be formed into the line of flow itself.

In looking to the specification for guidance, the Court notes that the patent refers repeatedly to the invention as a "flat bottom tank." The patent itself is entitled, "Flat Bottom Tank," and describes the invention as "related to portable tanks and more particularly to *flat bottom* tanks." '351 patent, col. 1, ll. 5-6 (emphasis added). The specification then goes on to state that "[b]y the present invention, there is provided a *flat bottom* tank." '351 patent, col. 1, ll. 15-16 (emphasis added). The description of the preferred embodiment does not describe the tank as having a flat bottom, but the tank is distinguished from prior art with uneven legs that compensate for a "sloped bottom." '351 patent, col. 2, l. 17. From the language in the specification, the Court concludes the invention is intended to have a flat, rather than a sloped, bottom head.

Turning to the claim language, the Court finds support for its conclusion in the definition of the slope itself. The claims define the line of flow as "having a downward slope." That is, it is the line of flow and *not* the bottom head that has a downward slope. While the patent states it may be embodied in several forms, the Court believes that to construe the claim language to include sloping the entire bottom head to form the sloped line of flow would be to depart from the "spirit or essential characteristics" of the "flat bottom tank." *See* '351 patent, col. 3, ll. 17-18. Therefore, the Court finds the language "having a downward slope extending from a first one of said corner portions to a second one of said corner portions, said second corner being located diagonally opposite said first corner" is properly construed to mean the line of flow or canal has a downward slope formed into it that is higher in elevation at one corner of the tank bottom and lower in elevation in the diagonally opposite corner of the tank.

6. *Preamble language of Claim 13*

The preamble language of claim 13 states in pertinent part: "A portable tank for liquids ... which provides for complete drainage of liquid from the tank." '351 patent, col.4, ll. 21-23. The parties argue as to whether this language should be construed as providing context or as additional claim limitations.

It is often unclear how preamble language should be construed. The court in *Marston v. J.C. Penney Co.,* set forth the following guidelines:

If the preamble merely states a purpose or intended use and the remainder of the claim completely defines the invention independent of the preamble, it is not a limitation on the claims. On the other hand, if the claim cannot be read independently of the preamble and the preamble must be read to give meaning to the claim or is essential to point out the invention, it constitutes a limitation upon the claim.

Marston v. J.C. Penney Co., 353 F.2d 976, 986 (4th Cir.1965).

Reading the preamble language with the *Marston* principles in mind, the Court finds the language "a portable tank for liquids ... which provides for complete drainage of liquid from the tank" merely states a purpose or intended use for the invention and does not constitute additional claim limitations. The thrust of claim 13 is to describe the characteristics of the bottom head of the tank; this is accomplished completely independent of the preamble language. Thus, the Court will not engage in construction of the terms "portable tank" or "complete drainage" as urged by Plaintiff.

7. "*One-piece construction*"

The final disputed claim language of the independent claims is found in claim 13. Claim 13 claims the "bottom head comprises a one-piece construction." '351 patent, col. 4, l. 24. Plaintiff contends "one-piece construction" should be construed to mean the bottom head of the tank is made out of a single piece of metal, and additionally argues the use of the word "comprises" means that uneven legs could be attached to the bottom head to create the sloped line of flow. Defendant argues attaching uneven legs to the bottom head would destroy the notion of "one-piece construction."

"Comprises" is considered an open-ended claim term that means the named characteristics or features of the claimed product are essential, but other elements may be added and still form a product within the scope of the claim. Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501 (Fed.Cir.1997). However, in claim 13, the open-ended aspect of "comprises" is necessarily limited and constrained by the fact "one-piece construction" is a required feature of the bottom head. To add uneven legs to create the line of slope, as Plaintiff argues is possible given the use of "comprises," would take away from the one-piece nature of the bottom head. That is to say, the bottom head, as a single piece of material, must include all essential characteristics listed in claim 13, including sloping bottom walls, a raised center portion and a sloped line of flow. The sloped line of flow may not be accomplished through the addition of uneven legs or other additional structures without destroying the "one-piece construction" of the bottom head as required by claim 13.

Therefore, the Court finds "one-piece construction" is properly construed to mean "made from a single piece of metal," and additionally finds "comprises" as used in claim 13 is not so open-ended as to include the use of additional structures, such as uneven legs, in the construction of the bottom head.

B. *Dependent Claims 3, 4, 5, 7, 15, 16, 17, and 19*

The '351 patent also includes twenty-two dependent claims. Plaintiff provided the Court with proposed constructions for disputed language in eight of these dependent claims-claims 3, 4, 5, 7, 15, 16, 17, and 19. At the *Markman* hearing, Defendant argued that claim construction was unnecessary on the dependent claims, but did state that all of the disputed terms in these claims could easily be given their plain meaning. While the Court understands that a dependent claim cannot be infringed unless the accused product first infringes the independent claim, *see* Teledyne McCormick Selph v. United States, 558 F.2d 1000, 1004 (Ct .Cl.1977), the Court believes it is still necessary to construe all disputed claim language whether found in dependent or independent claims.

1. "*Rounded*" *in Claims 3, 4, 15, and 16*

Dependent claims 3, 4, 15, and 16 claim side wall portions and corner portions "formed so as to be rounded." '351 patent, col. 3, ll. 56, 59; col. 4, ll. 51, 54. The Court finds that in the context of this patent, the term rounded is construed to have its ordinary and customary meaning of "to have a curved form; curved rather than jagged or angular."

2. "*Substantially equal height*" *in Claims 5 and 17*

Claims 5 and 17 claim side wall portions "formed to be of substantially equal height such that a tank shell may be easily fitted to the tank bottom." '351 patent, col. 3, ll. 62-63; col. 4, ll. 57-58. Plaintiff argues "equal height" should be construed to mean "equal height from the ground."

As the claims state, the equal height is desired to help fit the tank shell to the tank bottom. The specification further elaborates "[t]he side wall edges are of substantially equal height so as to allow smooth attachment of a tank shell to the tank bottom." '351 patent, col. 2, ll. 31-33. The Court finds that a common sense interpretation of "substantially equal height" to aid in the fitting of the tank shell to the tank bottom would mean that the side wall portions, as measured from the top of the side walls, would all be at an equal height such that a level surface would be created on which to place the tank shell. To create this level surface, the top of the side walls would have to be of equal height relative to the ground. Therefore, the Court finds side wall portions "formed to be of substantially equal height" means the side walls themselves are shaped to be substantially the same height as measured from the top of the side walls to the ground.

3. "*Drain outlet spaced apart from said line of flow" in Claims 7 and 19*

Dependent claims 7 and 19 reference a drain outlet "spaced apart from said line of flow." '351 patent, col. 3, l. 67; col. 4, l. 62. The specification notes that the outlet "does not extend into the line of flow." '351 patent, col. 3, l. 1. Taking the specification and the claim language together, the Court finds the phrase "drain outlet spaced apart from said line of flow" means a drain that is placed away from and does not extend into the line of flow.

4.Claims 9 and 21

The disputed claim language of claims 9 and 21 is: "said drain outlet swedged downward such that said bottom wall portion containing said drain outlet slopes downwardly toward said drain outlet from the point in said line of flow nearest said drain outlet ." '351 patent, col. 4, ll. 4-8; col. 5, ll. 1-3. Nothing in the claim language or the specification suggests anything but the ordinary and customary meanings of these terms are required. Thus, the Court finds the disputed claim language is construed to mean the drain outlet is shaped such that there is a downward slope in the bottom wall containing the drain that extends from the portion of the line of flow that is closest to the outlet down to the drain outlet.

IT IS SO ORDERED.

W.D.Mo.,2007.
Custom Metalcraft, Inc. v. Hoover Materials Handling Group, Inc.