

United States District Court,
N.D. Illinois, Eastern Division.

PHOENIX CLOSURES, INC,
Plaintiff.

v.

SILGAN PLASTICS CORP,
Defendant.

Nov. 15, 2005.

James Patrick White, John Aron Carnahan, Welsh & Katz, Ltd., Chicago, IL, for Plaintiff.

Peter L. Costas, Pepe & Hazard, LLP, Hartford, CT, Michael J. Abernathy, Michael Robert Osterhoff, Sarah Lynn Taylor, Wendy J. Sawyer, Bell Boyd & Lloyd LLC, Chicago, IL, for Defendant.

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge.

Phoenix Closures, Inc. has sued Silgan Plastics Corp. for infringement of U.S. Patent No. 6,257,432, which relates to a sealing mechanism found in powdered drink containers. This case is before the Court for construction of the disputed claim language in the patent-in-suit.

Facts

Because powdered drink mix is notorious for forming undesirable clumps when exposed to humid air, manufacturers of the product are always in need of an inexpensive cap and container assembly that forms an airtight seal after repeated opening. Len Ekkert, Phoenix's vice-president, invented one of these sought-after assemblies, patented his invention in July 2001, and assigned the patent to Phoenix. We include as an appendix an illustrative diagram from the patent. Silgan sells a competing cap and container assembly that Phoenix believes infringes on independent claims 3 and 14 of its patent as well as a number of dependent claims. The construction of the independent claims is in dispute.

After briefing the issue of claim construction, the parties presented oral argument and submitted additional material during a October 26, 2005 hearing.

Discussion

Claim construction entails questions of law to be determined by the Court. *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 977-78 (Fed.Cir.1995); Mars, Inc. v. H.J. Heinz Co., 377 F.3d 1369, 1373 (Fed.Cir.2004). In Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005), the Federal Circuit clarified the approach courts should use when analyzing claim language. It directed courts to focus at the outset on how

the patentee used the claim term in the claims, specifications, and prosecution history, rather than beginning the analysis by consulting dictionaries or similar sources. *Id.* at 1321. The court noted that "heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract." *Id.* at 1315.

The claim term's ordinary and customary meaning, as understood by persons who were skilled in the relevant technology at the time the patent application was filed, continues to serve as the baseline interpretation of the proper scope of the claim. Courts are instructed to analyze the disputed terms in the context of the disputed claim itself, as well as in the context of the patent as a whole. *Phillips* emphasized that in addition to evaluating the claims of a patent in dispute, the specification is the "single best guide to the meaning of a disputed term." *Id.* (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). If the specification indicates that the patentee defined the term in a manner that differs from its generally conceived meaning or disavowed claim scope, the inventor's intention is dispositive. *Id.* at 1316.

Though the Federal Circuit emphasized the primary role intrinsic evidence should play in discerning the proper scope of claims, it did not preclude the use of extrinsic evidence altogether. Judges remain free to consult dictionaries or comparable sources to assist in understanding the meaning of words and to gain a better understanding of the underlying technology. *Phillips*, 415 F.3d at 1322. In particular, the court noted that dictionaries may be helpful in determining the ordinary meaning of certain non-technical, commonly understood words. *See id.* at 1314. Thus, dictionaries, and particularly technical treatises, may continue to inform claim construction, so long as a court does not adopt a definition that contradicts the intrinsic evidence. *Id.* at 1322-23.

In sum, though there exists no "magic formula ... for conducting claim construction," and the sequence of steps used by the judge is unimportant, *id.* at 1324, the focus should remain on construing the claims within the context of the patent itself.

At the outset, Phoenix maintains that two of the claim terms at issue have clear meanings and do not require definition. Thus, the constructions proposed by Phoenix are alternatives should the Court conclude that a definition is necessary. Phoenix has cited no authority, however, for the proposition that it is unnecessary to construe a disputed limitation when its meaning is obvious to one of the parties. The Federal Circuit has held that claim construction is necessary "when the meaning or scope of technical terms and words of art is unclear and in dispute and requires resolution to determine the issue before the court." *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1360 (Fed.Cir.2004) (quoting *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed.Cir.1997)). The fact that the meaning of a particular limitation is disputed suggests that the meaning is not entirely clear from the language used in the patent and that the Court must construe the term. The Court agrees with Phoenix that certain terms may not require elaborate interpretation, *see Brown v. 3M*, 265 F.3d 1349, 1352 (Fed.Cir.2001), but Phoenix's suggestion that entire limitations in dispute do not require construction is at odds with the purpose of claim construction.

1. Claim 3

The parties dispute several terms found in claim 3, which discloses:

A cap and container assembly comprising: a container and a cap; the container including a base, and a neck for sealing engagement with the cap; a land area at an end of the neck defining a container mouth, and an

exterior surface of the neck below the land area and an exterior surface of the base defining an exterior side surface of the container; the cap including a top and a skirt depending peripherally from the top; the skirt including a horizontal stopping surface; wherein the stopping surface of the skirt and a horizontal stopping surface on the container engage to form a positive stop to lower engagement of the cap with respect to the container.

a. Top / Skirt

The parties contest the scope of the word "top" and "skirt," which appear in claims 3 and 14. Phoenix argues that the top is the "upper portion that covers the container"; Silgan argues that it is "the upper central portion (convex as seen from the interior) of the cap which is bounded by the depending peripheral skirt and from which the sealing protrusions depend." In essence, Phoenix maintains that the top includes the curved outer edge of the upper portion of the cap, and ends somewhere near the point where the outer edge becomes vertical. Silgan maintains that the top ends where it transitions from convex to concave. As for the term "skirt," Phoenix defines it as "the outer portion," and Silgan defines it as "that portion of a cap which bounds the top of the cap and depends peripherally therefrom and which includes a generally cylindrical portion for engagement with the cylinder."

Both parties cite the specification to support their proposed definitions. At column 2, lines 17-18, the specification states, "The top ... is generally convex as viewed from inside of the cap." Silgan says this passage suggests that the top ends near where it transitions from a convex to concave shape, FN1 though we note that saying the top is *generally* convex does not mean that it is *entirely* convex. On the other hand, at column 3, lines 20-21, the patent describes the skirt as "generally the same diameter as the upper part of the base." This description suggests that the skirt ends near where the cap transitions from concave to being a more or less straight vertical line.

FN1. When we use the terms concave and convex, we mean as viewed from the interior of the container.

If one examines these definitions of top and skirt collectively, one quickly realizes that the concave portion of the cap—the curved portion or the outer edge—remains unnamed. Silgan argues that the concave area is part of the skirt, because one of the preferred embodiments illustrates a number of "stops or projections on the interior surface of the skirt," some of which extend into the concave area. The Court rejects this argument. Though the specification requires stops or projections on the interior surface of the skirt, nothing in the specification limits the projections from extending into the top.

The only other meaningful description of the top or skirt that sheds light on whether the concave portion should be labeled the top, the skirt, or some combination of the two is, as Phoenix suggests, in the claims themselves, which say that the skirt "depends from the top." Silgan argues that the skirt can depend outwardly and downwardly from the top, so that it can include the concave portion of the top. This interpretation, however, is contrary to the ordinary meaning of the word "depend," which means to hang down, just as the annular protrusions described in the patent depend, or hang down, from the top. *See Webster's Third New International Dictionary* 604 (1993). Given this additional description, the Court concludes that the top includes the concave portion as well as the convex portion, so that the skirt—consistent with the description in the claims—depends from the top.

Thus, the court adopts the following construction: the top is the upper portion of the cap from which the

sealing protrusions and skirt depend, and the skirt is the outer portion of the cap which is generally the same diameter as the upper portion of the base.

2. Horizontal stopping surface

The meaning of "horizontal stopping surface" is not greatly disputed based on the parties' submissions. Phoenix says that it means "a surface with a horizontal portion for preventing movement." Silgan says that it means:

a horizontal surface on one member (the bottle) against which horizontal stopping surface or another member (the cap) abuts or engages to preclude further movement of the another [sic] member (the cap) in one direction (downwardly on the bottle); a horizontal surface on the other member (the cap) which engages with a horizontal surface on the (one member bottle). A surface is an area having length and width.

To the extent Phoenix argues that a horizontal stopping surface is a surface that is only partly horizontal, the Court rejects its definition. Common sense, as well as the patent specification, dictates that a horizontal surface is entirely, not partly, horizontal. The remainder of the parties' definitions are substantially the same. Both agree that the word "stopping" means "to preclude or prevent movement," and Phoenix does not contest that a surface requires "length and width." Thus the Court adopts the following construction of the term: a horizontal area having length and width, which purpose is to preclude movement.

3. Engage to form a positive stop

The parties also dispute the meaning of the phrase "engage to form a positive stop." Phoenix proposes, "contact to prevent," and Silgan proposes, "the abutting of a surface on one member against a surface on another member to preclude movement of one member in one direction relative to another member."

Read in context of the entirety of claim 3, Silgan's definition includes redundant language. It includes a description of how the abutting surfaces "preclude movement of one member in one direction relative to another member," though claim 3, following the phrase "positive stop," already reads, "to lower engagement of the cap with respect to the container." In other words, Silgan's definition includes words and ideas that are already present in other parts of the claim—namely, preventing or stopping "lower movement of the cap with respect to the container." *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed.Cir.2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). Silgan's definition is also unnecessarily complex insofar as it rejects Phoenix's simpler, "contact," for its own, "abutting of a surface on one member against a surface on another member." Because contact is synonymous with the phrase chosen by Silgan, we construe the claim language "engage to form a positive stop to" as follows: contact each other and prevent.

2. Claim 14

Claim 14 discloses:

A cap and container assembly comprising: a container and a cap; the container including a base, and a neck for engagement with the cap, an end of the neck defining a container mouth; the neck being substantially symmetrical about a central vertical axis, the neck forming a flexible lip proximate the mouth, with an upper, generally frustoconical, exterior sealing surface, the neck further forming a lower, generally frustoconical, interior sealing surface, the neck further forming a bottom exterior surface, of greater

diameter than the diameter of the lip, for securing engagement with the cap; the cap including a top, a skirt depending peripherally from the top, at least one first annular sealing protrusion depending from an interior surface of the top, and at least one second annular sealing protrusion depending from the interior surface of the top; wherein, upon securing engagement of the skirt with the bottom exterior surface of the neck, the at least one first sealing protrusion sealingly engages the lower interior sealing surface, and the at least one second sealing protrusion sealingly engages the upper exterior sealing surface.

a. Frusto-conical

The parties agree that the phrase "frusto-conical" needs to be construed because it is a geometric term unfamiliar to most individuals. They also agree on-and the Court adopts-the following construction: shaped like a portion of a cone.

b. Flexible lip

Phoenix contends that flexible lip means "resilient portion." Silgan contends that it means "the end portion of the neck of a container which is configured to resiliently flex under load about one or more hinge[d] areas."

Both parties agree that a flexible lip must be resilient, meaning it can flex under pressure and then spring back into its original position once the pressure is released. The disagreement is whether the flexible lip must contain a hinged, or V-shaped, area. Silgan points out that the specification, at column 2, lines 19-21, says, "it is preferable if the neck initially doubles back creating a flexible lip ...," and at column 2 lines 55-60 says, "it is preferable that materials and the geometry of the top, the first protrusion, and the neck render them sufficiently flexible to allow for some temporary deformation of shape. This is facilitated by the curvature of the top and the bends in the neck." Thus, as Silgan argues, the patent describes flexibility as something created by a bend or curve in the material.

Phoenix argues that the word "preferable" in the quoted language from the specification indicates that the curved or hinged lip is not a necessary part of the patent, but only a preferred embodiment, which the Federal Circuit has warned should not be imparted into the claims as a limitation. *See Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1319-1320 (Fed.Cir.2004). The Court recognizes this principle of construction, but does not believe that defining flexible as curved or bent in this instance would run afoul of the general rule.

Rather, what is preferable according to the specification is a flexible lip. If the Court was construing the word "lip," it would arguably be wrong to require a flexible lip on the ground that the specification said a flexible lip was preferable. Here, however, we are construing "flexible lip," not just "lip," and the specification says-in two different places-that flexibility is created by a bent or curved shape. The Court, therefore, adopts the following construction: a resilient, curved or bent, portion of the neck near the mouth of a container. This construction is consistent with the specification and does not require a V-shaped or hinged-shaped bend or curve, as these appear to be preferred embodiments of the term "flexible lip."

Conclusion

The disputed claim terms are construed in accordance with the conclusions set forth in this Memorandum Opinion and Order. The case is set for a status hearing on November 21, 2005 at 9:30 a.m. to discuss the possibility of settlement and the remainder of the discovery schedule.

APPENDIX

Tabular or graphic material set at this point is not displayable.

N.D.III.,2005.

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