

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

SAINT-GOBAIN CORPORATION,
Plaintiff.

v.

GEMTRON CORPORATION,
Defendant.

No. 1:04-cv-387

Oct. 3, 2005.

ORDER ON CLAIM CONSTRUCTION

WENDELL A. MILES, Senior District Judge.

In this action, plaintiff Saint-Gobain Corporation seeks a declaratory judgment that it did not infringe two patents owned by defendant, Gemtron Corporation. Alternatively, Saint-Gobain seeks a declaratory judgment that the patents are invalid. Gemtron has asserted counterclaims against Saint-Gobain alleging infringement of the Gemtron patents.

The case is currently before the court on the issue of claim construction. The parties have submitted their briefs and presented oral argument at a *Markman* FN1 hearing held on July 18, 2005.

FN1. *Markman v. Westview Instruments*, 52 F.3d 967 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384 (1996).

I

Gemtron is the owner of United States Patent Nos. 6,422,673 ("the '673 patent") and 6,679,573 ("the '573 patent") (collectively "the patents" or "both patents"). The '673 patent, issued on July 23, 2002, is directed to a "REFRIGERATOR COMPARTMENT HOUSING VERTICALLY ADJUSTABLE SHELVES, EACH FORMED FROM A PIECE OF TEMPERED GLASS SNAPPED-FASTENED TO AN INJECTION MOLDED FRAME." The '573 patent, issued on January 20, 2004, is, in contrast, directed merely to a "REFRIGERATOR SHELF." To put it more simply, the '673 patent is directed to a refrigerator compartment having adjustable shelves both supported and held in place by ribs or ledges, while the '573 patent is directed to the refrigerator shelf itself, which is composed of a frame made of molded synthetic material enclosing a snap-in glass panel. In its Amended Answer and Counterclaim, Gemtron accuses Saint-Gobain of infringing both patents by manufacturing, using, importing into the United States, and selling refrigerator shelves which incorporate the inventions claimed in the patents. FN2

FN2. Gemtron's original answer did not assert any counterclaims against Saint-Gobain. Subsequently, Gemtron did file-without leave of court-an amended answer which included counterclaims for infringement of the patents. On July 20, 2005, the court entered an order allowing this amended pleading *ex post facto*.

II

An analysis of whether a patent is infringed involves a two-step determination: (1) determining the meaning and scope of the patent claims allegedly infringed, and (2) comparing the properly construed claims to the accused device. *Markman v. Westview Instruments*, 52 F.3d 967, 976 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384 (1996). "[T]he interpretation and construction of patent claims, which define the scope of the patentee's rights under the patent, is a matter of law exclusively for the court." *Id.*, 52 F.3d at 970-971.

Saint-Gobain denies any infringement, and maintains that the patents are invalid. However, the court does not address either of these issues at this time. Instead, the court's current task is to address the threshold issue of claim construction.

In its recent en banc decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed.Cir.2005), the Federal Circuit reaffirmed the basic principles of claim construction. The following basic principles recited in *Phillips* apply to this case:

1. The words of a claim are generally given their ordinary and customary meaning. The ordinary and customary meaning of a claim term 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, i.e., as of the effective filing date of the patent application. *Phillips*, 415 F.3d at 1312-1313.
2. General purpose dictionaries may be helpful where the ordinary meaning of claim language as understood by a person of skill in the art is readily apparent, and claim construction involves little more than application of commonly understood words. *Id.* at 1314.
3. Where the meaning of a claim term as understood by persons of skill in the art is not immediately apparent, the court must look to sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean. These sources include the context of the term as used in the claim, use of the term in other claims of the patent and in the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art. *Id.*
4. Although courts are authorized to rely on extrinsic evidence in claim construction, such evidence is less reliable and therefore less significant than the intrinsic record in determining the legally operative meaning of claim language. Extrinsic evidence consists of all evidence external to the patent and prosecution history. Dictionaries-particularly technical dictionaries-and treaties, as well as expert and inventor testimony, are within the class of extrinsic evidence. *Id.* at 1318-1319.
5. The court is not barred from considering any particular sources or required to analyze sources in any specific sequence, so long as those sources are not used to contradict a claim meaning that is unambiguous in light of the intrinsic evidence. *Id.* at 1324.

III

Gemtron has requested construction of certain terms of the patent claims. The terms for which Gemtron seeks construction are as follows: (1) "relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure," and (2) "relatively narrow finger." Because Saint-Gobain does not appear to dispute Gemtron's proposed construction of the phrase "relatively narrow finger," FN3 the only term at issue for claim construction purposes is "*relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure.*"

FN3. Saint-Gobain has not disputed Gemtron's proposed construction of "relatively narrow finger" as "a lower wall with a width that is narrow as compared to the length of the lower wall."

A. Gemtron's Proposed Construction

Gemtron argues that the proper interpretation of "*relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure*" is as follows: "The end edge portion is physically characterized by being relatively resilient such that it can temporarily deflect and subsequently rebound, when glass is being inserted into the frame, to snap-secure the glass into the frame." Gemtron's Opening Brief on Claim Construction at 5. Gemtron contends that the "relatively resilient" limitation defines a physical characteristic of the end edge portion of the refrigerator shelf frame. According to Gemtron, at least one of the frame portions-front, rear, or sides-of the claimed shelf includes a lower wall with a relatively resilient end edge portion which temporarily deflects and subsequently rebounds, when the glass is inserted into the frame.

B. Saint-Gobain's Proposed Construction

Saint-Gobain argues that the meaning of the term "relatively resilient" is as follows: "the end edge portion is sufficiently flexible to permit the glass in the finished product to be pushed out of the frame and pushed back into the frame." Saint-Gobain's *Markman* Brief at 4.

IV

The "relatively resilient" limitation of which Gemtron seeks construction is contained in claims 1, 6-9, 14, 17-18, 23, 26-27, 32, and 37-41 of the '673 patent and claims 1, 6-10, and 15-44 of the '573 patent. Claim 1 of each of the patents is representative of the asserted claims with respect to the use of the term "relatively resilient" in both patents.

Claim 1 of the '673 patent recites the following:

1. A refrigerator compartment comprising opposite substantially parallel side walls and a rear wall there between, a plurality of vertically spaced shelf-supporting ledges along each of said sidewalls, said shelf-supporting ledges being disposed in horizontally aligned pairs; at least one shelf defined by a one-piece open frame made of substantially homogeneous polymeric/copolymeric molded synthetic material and a piece of glass closing an opening defined by said frame; said open frame having opposite substantially parallel side frame portions and opposite substantially parallel front and rear frame portions; said glass piece having opposite substantially parallel side edges and opposite substantially parallel front and rear edges; said side, front and rear frame portions being substantially contiguous to said respective side, front and rear

edges; each of side frame portions being defined by an upper wall, a side wall depending from each upper wall and a lower wall projecting from its side wall toward an opposite sidewall with the opposing lower walls being spaced from each other and each defining with an associated upper wall a glass piece side edge-receiving channel, each upper wall and lower wall having a terminal free edge, said glass piece side edges being spaced a predetermined distance from each other, said upper wall terminal free edges being spaced a predetermined distance from each other, said lower wall terminal free edges being spaced a predetermined distance from each other, the predetermined distance of the glass piece side edges being appreciably greater than the predetermined distance of said upper wall edges and only slightly greater than the predetermined distance between said lower wall terminal free edges whereby said glass piece side edges are captively retained in said glass piece side edge-receiving channels, *each lower wall including a relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure said glass piece side edges in said glass piece side edge-receiving channels*, and said lower walls being disposed in sliding relationship upon said shelf-supporting ledges whereby product loading upon said glass piece which might tend to cause said lower walls to inadvertently deform and release said glass piece side edges is effectively resisted to preclude inadvertent glass piece/frame disassembly under load.

'673 Patent, cols. 6-7 (emphasis supplied).

Claim 1 of the '573 patent recites the following:

1. A refrigerator shelf comprising a one-piece open frame made of substantially homogeneous polymeric/copolymeric molded synthetic material and a piece of glass closing an opening defined by said frame; said open frame having opposite substantially parallel side frame portions and opposite substantially parallel front and rear frame portions; said glass piece having opposite substantially parallel side edges and opposite substantially parallel front and rear edges; said side, front and rear frame portions being substantially contiguous to said respective side, front and rear edges; each of said side frame portions being defined by an upper wall, a side wall depending from each upper wall and a lower wall projecting from its side wall toward an opposite side wall with the opposing lower walls being spaced from each other and each defining with an associated upper wall a glass piece side edge-receiving channel, each upper wall and lower wall having a terminal free edge, said glass piece side edges being spaced a predetermined distance from each other, said upper wall terminal free edges being spaced a predetermined distance from each other, said lower wall terminal free edges being spaced a predetermined distance from each other, the predetermined distance of the glass piece side edges being appreciably greater than the predetermined distance of said upper wall edges and only slightly greater than the predetermined distance between said lower wall terminal free edges whereby said glass piece side edges are captively retained in said glass piece side edge-receiving channels, and *each lower wall including a relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure said glass piece side edges in said glass piece side edge-receiving channels*.

'573 Patent, cols. 6-7 (emphasis supplied).

In addition, the specification contained in each of the patents provides as follows:

... In the assembled condition of the frame **30**, the side edges **36, 37**, the front edge **38** and the rear edge **39** of the glass panel **35** are each snap-secured to the respective side frame portions **46, 47**, the front frame portion **48** and the rear frame portion **49** of the frame **31**.

The open frame **31** of each shelf **30** includes an upper peripherally continuous wall **71** having an inboard or innermost edge **72** which defines an opening **0** (FIGS. **6** and **9**) of the frame **31**. A depending peripherally continuous peripheral wall **73** (FIGS. **3** and **4**) depends from the upper wall **71** and is peripherally coextensive therewith and thereby defines a generally depending continuous peripheral skirt. The depending continuous peripheral wall or skirt **73** has associated therewith inwardly directing fingers associated with the frame portions **46** through **49** of the frame **31**. As is best illustrated in FIG. **8**, a single finger **86** is associated with the side frame portion **46**, a single finger **87** is associated with the side frame portion **47**, two spaced fingers **88**, **88'** are associated with the front frame portion **48** and two rear fingers **89**, **89'** are associated with the rear frame portion **49**. Each finger **86** through **89'** includes a short leg **90** which is relatively thin and resilient and terminates in a terminal free edge **91**. Each leg **90** of each finger **86** through **89'** defines with the depending peripheral wall **73** and the upper peripheral wall **71** a glass edge-receiving channel **100** (FIGS. **3** and **4**). Therefore, there is a glass edge-receiving channel **100** associated with each of the fingers **86** through **89'**.

As is apparent from and illustrated in FIGS. **3**, **4** and **8**, the distance between opposite terminal free edges **36**, **37** and **38**, **39** of the glass panel **35** are appreciably greater than the corresponding distances between opposite portions of the peripheral edge **72** of the upper wall **71**, whereby the upper wall **71** appreciably overlies the side edges **36** through **39** of the glass panel **35** along the upper surface (unnumbered) thereof, as is readily apparent from FIGS. **3** and **4** of the drawings. However, the distance between the terminal free ends **91** of the pairs of opposing fingers **86**, **87**; **88**, **89**; and **88'**, **89'** (FIGS. **7** and **8**) is each slightly less than the distance across opposite terminal free edges of the glass panel **35**. Due to this relative dimensioning and the relatively flexible nature of the fingers **90** and the finger terminal edge portions **91** thereof, the latter are free to temporarily flex and deform as the glass panel **35** is inserted upwardly, as is indicated by the arrow U in FIG. **8**, which causes the fingers **87** through **89'** to temporarily deform, resulting in the edges **36** through **39** of the glass panel **35** to essentially pass or snap into the associated channels **100** of each finger **87** through **89'** whereupon the finger terminal free edge portions **91** rebound to their original position and interlock beneath each glass edge **36** through **39**, as is most evident in FIGS. **3** through **4** of the drawings. In this manner, each shelf **30** is constructed of only two pieces of material, namely, the one-piece injection molded frame **31** and the tempered glass panel **35** retained in snap-secured relationship to each other by means of the channels **100** of each of the fingers **86** through **89'**.

'673 Patent, cols. 4-5; '573 Patent, cols. 4-5.

Both of the patents at issue are product patents, as distinguished from process patents, and the parties do not dispute that the claims of the patents are product claims. Although discussing the method of securing the glass within the frame ("snap-securing"), the court recognizes that the claims at issue are product claims which cover refrigerator shelves however they are made. *See* AFG Indus., Inc. v. Cardinal IG Co., Inc., 375 F.3d 1367, 1370 (Fed.Cir.2004) (patent claims covering glass window with coating to reflect infrared light, although discussing method of depositing layers of zinc oxide, were product claims which covered inventive glass structure however it is made or used); *see also* Vanguard Prods. Co. v. Parker Hannifin Corp., 234 F.3d 1370, 1372 (Fed.Cir.2000) (specification showed that claim term "integral" was "used to describe the product, and not as a designation of a specific manufacturing process.... The method of manufacture, even when cited as advantageous, does not of itself convert product claims into claims limited to a particular process").FN4 The court must determine the correct construction of the phrase "relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure" as used in the claims of the patents.

FN4. Gemtron has filed a motion for summary judgment, in which it has clarified that the "relatively resilient" term used in its claims describes a physical characteristic of its products, and does not turn the claims into product-by-process claims. Gemtron's Memorandum in Support of its Motion for Summary Judgment as to Infringement (docket no. 40), at 5 n.4. Although nothing in this Order shall be construed as an expression on the merits of that motion, the court believes that Gemtron's clarification is relevant to the issue of its proposed claim construction.

The parties do not appear to disagree on the fundamental definition of resilient, which is "returning freely to a previous position, shape, or condition," Webster's Third New Int'l Dictionary 1932 (1971), or "capable of withstanding shock without permanent deformation or rupture." Merriam-Webster Online, <http://www.m-w.com> (2005). The issue, to be precise, is-how resilient is "relatively resilient"? According to Gemtron, this resilience is present only to the extent that the end edge portion of the shelf frame is able to temporarily deform as the glass panel is being inserted. According to Saint-Gobain, however, this resilience is present to the degree that the end edge portion of the shelf frame is also able to temporarily deform as the glass panel is being removed.

At the outset, it is noted that the pertinent claim language- "*relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure*"-itself indicates that the characteristic of resilience is defined only with respect to the ability to "*snap-secure*" the glass into the frame, and not with respect to the ability to remove the glass from the frame. '673 Patent, col.7, ll. 21-23; '573 Patent, col. 7, ll. 16-18. In addition, the language contained in Claim 1 of the '673 patent defines relative resilience in a manner which indicates an intention to preclude resilience to a degree which results in disassembly of the glass from the frame. This limitation on the "relative resilience" of the frame is clarified through use of the following language: (1) the adverb "inadvertently" in addressing a potential tendency of the frame to "deform and release" the glass; and (2) the adverb "effectively" in addressing the ability of the product to "preclude inadvertent glass piece/frame disassembly under load." '673 Patent, col. 7, ll. 27-30.

The court can easily reject Saint-Gobain's proposed construction of the disputed language, that "the end edge portion is sufficiently flexible to permit the glass in the finished product to be pushed out of the frame and pushed back into the frame." Nothing in either the claims or the specification includes such a restriction. Instead, Saint-Gobain bases its interpretation-at least in part-on what it deems to be a "test" proposed in an expert affidavit which Gemtron submitted in support of a motion for summary judgment (docket nos. 39-40). In his affidavit, Gemtron's expert, Greg Miedema, opines that portions of Saint-Gobain's accused refrigerator shelves have the "relatively resilient" characteristic claimed in Gemtron's patents. According to Mr. Miedema, one can show that this characteristic is present in the accused shelves "by removing the glass and snap-securing another piece into the one-piece frame." Declaration of Greg Miedema at 3, para. 9. However, Saint-Gobain's reliance on this extrinsic evidence for purposes of claim construction is misguided. Mr. Miedema's affidavit is directed to the issue of infringement-which is a question of law-and not to the issue of claim construction, which is an issue of fact. *See Stryker Corp. v. Davol, Inc.*, 234 F.3d 1252, 1258 (Fed.Cir.2000) ("Infringement, both literal and under the doctrine of equivalents, is a question of fact"); *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1564 (Fed.Cir.1991) ("The determination whether an accused device infringes the claims of a patent is one of fact"). The Miedema affidavit, which suggests a means by which infringement may be demonstrated, simply sheds no light on how to construe the disputed language of the claims.

Saint-Gobain's interpretation also relies, in part, on the following language contained in the specification of

the '673 patent, the refrigerator compartment patent:

Most importantly, the fingers of the side frame portions slide upon and are supported by the refrigerator compartment side wall ribs or channels which effectively resist any tendency of the glass panel edges to snap outwardly of the fingers in a downward direction under product loading of the glass panel. In this manner, a sliding shelf is manufactured at a relatively low cost from only two pieces of material (a frame and a glass panel) in the absence of the added costly manufacturing step of applying adhesive and removing excess adhesive, while at the same time increasing conductivity because the fingers cover but minor lower surface areas of the glass panel side, front and rear edges.

'673 Patent, col. 2, ll.53-58 (emphasis supplied).

Certainly, "the specification 'is always highly relevant to the claim construction analysis.' " Phillips, 415 F.3d at 1315 (citation omitted). However, Saint-Gobain misinterprets what is intended as an advantage of the invention as a limitation of the claims. "An invention may possess a number of advantages or purposes, and there is no requirement that every claim directed to that invention be limited to encompass all of them." E-Pass Technologies, Inc. v. 3Com Corp., 343 F.3d 1364, 1370 (Fed.Cir.2003) (footnote omitted). The language on which Saint-Gobain relies above comes from the specification of ' 673 patent, and recites an advantage of that patent: side wall ribs or channels contained within the refrigerator compartment, which effectively resist any tendency of the shelf's glass panel to snap out of its frame under the weight of loading.FN5

FN5. It is apparent that a requirement that the frame portions be sufficiently "resilient" to enable the glass to be pushed back out of the frame-once it has been inserted-cannot read into the claim language, for, as both parties have noted, such a structure-a shelf which collapses under loading-would be disadvantageous.

Further indication that the language emphasized by Saint-Gobain ("*Most importantly, the fingers of the side frame portions slide upon and are supported by the refrigerator compartment side wall ribs or channels which effectively resist any tendency of the glass panel edges to snap outwardly of the fingers in a downward direction under product loading of the glass panel*") does not represent a limitation of the disputed claim language is contained in other claims of the patents, which indicate that the shelves either may or may not include a bond or adhesive used between the frame and glass. '673 patent, cols. 7-8; '573 patent, cols. 7-10. Use of a bond or adhesive between the frame and glass would be likely to effectively preclude the glass from being pushed out of the frame.

Finally, the specifications of each patent, far from suggesting that relative resilience is to be defined with reference to the ability to disassemble the shelf, indicate an intention to preclude such a degree of resilience. Specifically, the abstracts of the patents describe shelves which are not intended to come apart when subjected to weight. Both abstracts provide as follows:

The fingers slide upon the ledges whereby product loading upon the glass piece which might cause the fingers to inadvertently deform and release the glass piece side edges is effectively resisted to preclude inadvertent glass piece/frame disassembly under load.

'673 Patent, Abstract; '573 Patent, Abstract.FN6 In addition, the specifications of both patents include the following statements:

FN6. The abstract of the patent speaks generally to the invention and, much like the syllabus of an opinion, sets forth general information about the document's content, which is described in more detail in the remainder of the document.

Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1121 (Fed.Cir.2004). The Federal Circuit has indicated that in construing claims in a patent action, "[w]e have frequently looked to the abstract to determine the scope of the invention[.]" Hill-Rom Co., Inc. v. Kinetic Concepts, Inc., 209 F.3d 1337, 1341 fn. (Fed.Cir.2000).

If unsupported by the upper walls **12** of the opposite ribs **10**, the side fingers **86, 87** would tend to deflect appreciably under the weight or load **W** and the glass panel **35** might inadvertently flex the fingers **86, 87** sufficient to escape the side channels **100** which in turn might cause the entire glass panel **35** to drop downwardly out of the closed opening **O** of the frame **31** or might stress sufficiently to crack. However, by the support afforded the side fingers **86, 87**, the tendency of these fingers to inadvertently deform and release the glass panel **35** is effectively resisted to preclude inadvertent glass panel/frame disassembly under load. Each shelf **30** is thereby capable of being manufactured at relatively low cost absent complexities of design or additive separate components[.]

'673 Patent, col. 6, ll. 19-29; '573 Patent, col. 6, ll. 19-29. From these statements, it may reasonably be inferred that the resilience of the frame should not be such that the glass has a tendency to separate from the frame.

CONCLUSION

Based upon the foregoing, the court interprets the relevant claim language- "*relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure*"-as follows: the end edge portion is sufficiently resilient that it can temporarily deflect and subsequently rebound when glass is being inserted into the frame.

So ordered.

W.D.Mich.,2005.

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