United States District Court,
D. Massachusetts.

SCHONBEK WORLDWIDE LIGHTING, INC,
Plaintiff.
v.
AMERICAN LIGHTING FIXTURE CORP., d/b/a Wilshire Manufacturing Company,
Defendant.

No. Civ.A.00-11834-DPW

March 19, 2002.

MEMORANDUM AND ORDER

WOODLOCK**, J.**

Plaintiff Schonbek Worldwide Lighting, Inc. ("Schonbek") alleges infringement of U.S. Patent No. 5,222,805 (the " '805 patent") by defendant American Lighting Fixture Corp., d/b/a Wilshire Manufacturing Company ("Wilshire"). The '805 patent is a utility patent for a chandelier frame.

Both parties have moved for summary judgment. I find a genuine issue of material fact as to one claim element, which must be resolved at trial, and accordingly will deny both motions.

I. Background

A. *Schonbek's Patent*

The '805 patent concerns a chandelier frame and method for making it. The patent generally teaches a chandelier frame that is made from "rings" and "spokes" cut from flat sheet metal and attached to each other through "interengaging locking means."

The principal claim at issue here is claim 1, which specifies:

A chandelier frame comprising,

rings adapted for supporting ornaments, each ring having a flat surface,

spokes attached to the rings for supporting the rings, each spoke having a flat surface and a thickness transverse to the flat surface, the flat surface defining a width that is substantially greater than the thickness, and wherein the flat surfaces of the coaxial rings define first parallel planes and the flat surfaces of the spokes define second planes substantially perpendicular to the first planes and wherein the spokes define along the length of the surface transverse to their flat surfaces and facing the rings at least three nonlinear segments,

mechanical interengagement means associated with the rings and spokes for aligning the rings and spokes with respect to each other, and

locking means mechanically and detachably locking the rings and spokes against disengagement from one another.

Thus, claim 1 of the '805 patent defines four elements: (A) rings that support ornaments; (B) spokes that support the rings; (C) means for aligning the spokes and rings; and (D) means for locking aligned rings and spokes to each other.

The parties dispute how to interpret each of these elements.

B. *Wilshire's Alleged Infringement*

Schonbek alleges that Wilshire's "Versailles" line of chandeliers literally infringes claim 1 of the '805 patent, because each frame in that line has the following characteristics: (A) two rings that support some ornaments directly because they rest on the rings, and others indirectly because they are attached to spokes that are themselves directly supported by the rings; (B) spokes with flat surfaces attached perpendicular to the rings; (C) a tab and slot interengagement mechanism; and D) a bolt locking mechanism.

Wilshire does not dispute that it has offered for sale the Versailles line of chandeliers, which have frames that include rings, spokes, and ornaments as contemplated by the patent claim. Wilshire contends, however, that its Versailles frames do not infringe claim 1 of the '805 patent because: (A) the rings are not "adapted [to] support[ ] ornaments," within the meaning of the claim; (B) the spokes only support one of the chandelier's two rings, whereas the patent claim states that multiple rings are supported by spokes; (C) other Wilshire chandelier frames used a tab and slot interengagement mechanism well before the '805 patent was registered; and (D) the Versailles frames do not employ the particular locking means specified in the '805 patent, or its equivalent.

C. *Procedural History*

Schonbek brought this civil action for patent infringement, trade dress infringement, trademark infringement, and unfair competition in September 2000. It was set for trial on an expedited basis. On the second day of trial, the parties resolved the bulk of the issues by stipulation. They agreed to present the only remaining issue-alleged infringement of the '805 patent-by presenting the cross motions for summary judgment which are now before me.

II. Discussion

Summary judgment is appropriate when no material fact is in dispute and the moving party is entitled to judgment as a matter of law. *See* Fed.R.Civ.P. 56(c). In this case, both parties assert that the facts are not in dispute. Rather, the dispute revolves around the proper construction of the basic independent claim of the '805 patent, claim 1.

Determining whether a patent is infringed is a two-step process. "The first step is claim construction, which involves ascertaining the scope and meaning of the claims at issue, while the second step involves determining whether the claims as construed read on the accused device." Streamfeeder, L.L.C. v. Sure-

Feed Sys., Inc., 175 F.3d 974, 981 (Fed.Cir.1999). Claim construction is a question of law to be determined by the court. Cybor Corporation v. FAS Technology, Inc., 138 F.3d 1448, 1454 (Fed.Cir.1998). Whether a given claim as construed reads on the accused device, on the other hand, is a question of fact. General Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 981 (Fed.Cir.1997). This latter inquiry is quite precise: "To show infringement, the plaintiff must establish that the accused device includes every limitation of the claim or an equivalent of each limitation." Dolly, Inc. v. Spalding & Evenflo Companies, Inc., 16 F.3d 394, 397 (Fed.Cir.1994).

Thus, in this case, I must first construe each disputed element of claim 1, and then evaluate each construction against Wilshire's Versailles chandelier frames. If the accused products do not feature even one element of the claim, then they do not infringe the patent.

I will consider each element of the claim in turn.

A. *Element A of Claim 1*

1. *Construction*

Element A of claim 1 defines "rings adapted for supporting ornaments." Both parties agree about the meaning of the term "ring," and Wilshire concedes that its Versailles Chandeliers feature them. The dispute thus centers upon the proper construction of the phrase "adapted for supporting ornaments."

Schonbek contends that an ornament whose weight is in any manner borne by a ring is, under the ordinary meaning of the term, "supported" by that ring. That is, if without the ring the ornament would fall to the ground, then that is sufficient to consider the ring as supporting the ornament. Wilshire counters that the ordinary meaning of "support" is more restrictive, such that an ornament is only supported if it is directly attached to the ring.

Neither party has argued that the word "support" has a particular meaning in the field of chandelier design or construction that differs from its ordinary one. Nor is the term precisely defined in the '805 patent's specification. Consequently, I begin my construction, just as the parties suggest, with the ordinary meaning of the term. *See* DeMarini Sports, Inc. v. Worth, Inc., 239 F .3d 1314, 1324 (Fed.Cir.2001).

Looking to dictionary definitions of the word "support," I note that *Webster's Third New International Dictionary* (1986) defines "to support" as "to hold up or in position: serve as a foundation or prop for: bear the weight or stress of: keep from sinking or falling," adding in a side note that " 'support' is applicable to a variety of uses with the general meaning or suggestion of carrying or leaning from or as if from below, of maintaining or holding up the weight or pressure of, and of forestalling sinking or falling back." The formal definition is virtually identical to that found in the earlier edition favored by some purists, *Webster's New International Dictionary* (2d ed.1950). *Cf.* Empire Co., Inc. v. OSHA, 136 F.3d 873, 878 n. 2 (1st Cir.1998). The *American Heritage Dictionary* (3d ed.1992), meanwhile, supplies similar meaning but in different order of priority, assigning the first to "to bear the weight of, especially from below," and the second to "to hold in position so as to keep from falling, sinking, or slipping."

None of these definitions appear to me to place particular emphasis on direct attachment as a crucial part of the meaning of "support." Furthermore, even if there was greater ambiguity in this regard, I note that Schonbek's interpretation of the claim language is strengthened, in the particular context of the '805 patent, by the patent's specification.

As noted, the specification does not precisely define the word "support," but the Federal Circuit has emphasized that the claim language need not be evaluated "in a vacuum." DeMarini Sports, 239 F.3d at 1325. *Cf. Duncan v. Walter,* 112 S.Ct. 2120, 2135 (2001) (Breyer, J. dissenting) ("dictionaries ... unilluminated by purpose, can lead courts into blind alleys"); Samuel A. Thumma & Jeffrey L. Kirchmeier, *The* Lexicon Remains A Fortress: An Update, 5 Green Bag 2d 51 (2001) (courts "should rely less on bare dictionary definitions and place more emphasis on context, conduct, purpose, history and other relevant sources") (*quoting* Samuel A. Thumma & Jeffrey L. Kirchmeier, *The* Lexicon Has Become A Fortress: The United States Supreme Court's Use of Dictionaries, 47 Buff. L.Rev. 227, 298 (1999)). Thus, whatever ordinary meaning is suggested for claim language by dictionary definitions must be put into the context of the specification, and even the prosecution history, of a given patent. DeMarini Sports, 239 F.3d at 1325. Indeed, "[s]uch intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." Vitronics Corporation v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996).

Looking then, to the '805 patent's specification, I find described at columns 5:33-38 and 11:12-37, and depicted at Figures 17 and 18, and embodiment of claim 1 that features an array of scrolled spokes borne by two inner rings (themselves attached by a central column to the ceiling), the spokes rather than these rings directly "bearing" or "carrying"-in the language of the specification-all but (arguably) one of the ornaments. FN1 Adopting Wilshire's restrictive definition of "support" thus would require ignoring a portion of the patent specification, insofar as it contains an embodiment in which the rings do not directly, but rather indirectly bear the ornaments. In light of the Federal Circuit's emphasis on the patent specification as "the single best guide to the meaning of a disputed term," Vitronics, 90 F.3d at 1582, and noting that dictionary definitions of "support" in any event do not focus on direct attachment, I decline Wilshire's invitation.

FN1. Wilshire seeks to dispose of this embodiment by suggesting that it is associated with claim 25 of the '805 patent, rather than claim 1. Claim 25 specifically concerns the "twist tab" locking mechanism that is disclosed in the patent specification as corresponding structure to the "locking means" of claim 1. The basis for Wilshire's position appears to be the fact that the patent specification describes the embodiment depicted at Figures 17 and 18 as fastened by such twist tabs, rather than one of the other locking mechanisms also disclosed. '851 patent, column 11:29-37. I find Wilshire's argument entirely unpersuasive. Although claim 25 is not drafted with explicit language of dependency, a practical reading cannot fail to perceive its linkage to the core claim of the '805 patent, claim 1. Furthermore, it strains reason to suggest that a full blown chandelier frame merely embodies a particular locking mechanism that is itself generally preferred for the subject matter of the '805 patent's core claim (*i.e.* chandelier frames).

Accordingly, I construe element A of claim 1 of the '805 patent to include circumstances where the rings of a chandelier frame bear the weight of ornaments only indirectly.

2. *Application*

Under the construction I have just adopted, there is little question that Wilshire's Versailles frames read on element A.

I note, however, that the Versailles frames would still appear to do so even under Wilshire's more restrictive definition of "support ." The Versailles frames feature essentially the same structure as the embodiment depicted at Figures 17 and 18 of the '805 patent, except that the lower inner ring of the Versailles frames is

not connected to the top one (and hence, the ceiling) by a central column. Attached to the base of both rings is ornamental crystal. Furthermore, the surface of the lower ring supports an ornamental glass spear, while an ornamental crystal pendant hangs from its base. Wilshire presents no good argument for discounting these features as "ornaments" within the meaning of the '805 patent, or for viewing the rings to which they are, in fact, directly attached as not "adapted" for that purpose. In particular, I see no reason-and certainly no basis in the patent specification-to limit element A to hanging pendants connected by hook into slots in the directly supporting rink or spoke.

Accordingly, I find that there are alternative grounds to hold Wilshire's Versailles frames as reading upon element A of claim 1 of the '805 patent, even under a narrower construction than I have in fact adopted.

B. ***Element B of Claim 1***

1. ***Construction***

Element of claim 1 describes "spokes attached to the rings for supporting the rings." The parties agree about the meaning of the terms "rings" and "spokes," and Wilshire concedes that the Versailles frames have both. The parties dispute, however, the meaning of the clause "for supporting the rings." Wilshire argues that spokes support rings, within the meaning of this element, only if the spokes actually bear the weight of the rings. Wilshire concludes that its Versailles chandeliers do not infringe the '805 patent because only one inner ring is borne by the spokes, while the other inner ring (itself borne by the center plate hanging from the ceiling) bears the weight of the spokes. FN2 Schonbek counters that when the rings and spokes of the accused chandelier frames are attached to each other, they "support" each other, like the stones in an arch, regardless of which is attached to the ceiling and bears the weight of the other.

FN2. The language of element B suggests that the spokes must support a plurality of rings.

Schonbek's definition of "support" in the context of element B has a somewhat more attenuated connection to dictionary definitions than does its definition of the same term in the context of element A. Those definitions do not expressly speak to the question of direct or indirect attachment, but they do fairly convey a sense of "keep from falling."

Again, analysis of the meaning of "support" in the context of this element must take into account the patent specification, and in particular, the embodiment depicted at Figures 17 and 18. That embodiment, after all, does not even feature a single ring whose weight is as clearly borne by the spokes as the lower ring in Wilshire's Versailles frames, insofar as both rings of the embodiment depicted at Figures 17 and 18 are attached to the center column hanging from the ceiling. Again, adopting Wilshire's more restrictive definition of "support" would necessitate ignoring the '805 patent specification in this regard.

It might be argued that doing just that is appropriate in order to avoid expanding element B's reference to "support" beyond a narrow meaning. In particular, a leading treatise states that "the specification may be referred to in order to explain any ambiguity in the claim and to limit the claim, ... [but] the specification is never available to expand the claim." Ernest Lipscomb, *Walker on Patents 3d,* s. 21:22, at 337. However, recent Federal Circuit decisions appear to refine this pronouncement, instead suggesting that what must be considered, in light of the specification, is whether the drafter of claim language "intended to use the claim language in a manner different than its ordinary meaning." Pall Corporation v. PTI Technologies, 259 F.3d 1383, 1391 (Fed.Cir.2001); *see also* DeMarini Sports, 239 F.3d at 1323 ("the specification is reviewed to

determine whether the patentee used terms in a manner inconsistent with their ordinary meaning").FN3

FN3. By contrast, the Federal Circuit has clearly maintained that *extrinsic* evidence-like expert testimony, articles, and inventor testimony-"may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or [prosecution] history." Bell Atlantic Network Services, Inc. v. Covad Communications Group, Inc., 262 F.3d 1258, 1269 (Fed.Cir.2001).

No doubt, it would be helpful if the '805 patent's specification more precisely defined element B's use of "support." It does not do so. However, evidence of the claim drafter's intent to use "support" in a somewhat broader fashion than ordinary is not here limited to a random and unexplained figure. Rather, at two separate points, the patent specification clearly details what Figures 17 and 18 depict, and describes that structure as one embodiment of the invention. '851 patent, column 5:33-38, column 11:12-37. *See* MSM Investments Company, LLC v. Carolwood Corporation, 259 F.3d 1335, 1339 (Fed.Cir.2001) (specification suggests that inventor intended to use term more broadly than its ordinary meaning, even thought it "does not specifically define the term"). Furthermore, as noted above, I am not persuaded that the embodiment is meant to be-or even can logically be read as-independent from claim 1. Accordingly, I decline to construe element B's use of the term "support" to convey only the function of "bear the weight," such as would exclude the embodiment depicted at Figures 17 and 18.

It remains for me to specify what element B's language of "for supporting the rings" affirmatively means. I note in this regard that mere attachment does not seem to be an interpretive option: to read element B's use of "support" as broadly as that would render the claim language ("spokes attached to the rings for supporting the rings") entirely redundant. Rather, "for supporting the rings" must reference some degree of functionality, consistent both with spokes bearing the weight of rings and with rings bearing the weight of spokes, over and above attachment alone.

I conclude that a variation of the dictionary definitional language of "hold in position" can serve the necessary purpose. I read claim 1 of the '805 patent as contemplating different configurations of rings and spokes sharing the following common feature: in each configuration, whether the rings are bearing the weight of the spokes or the spokes are bearing the weight of the rings, the two sets of parts "support" each other insofar as they hold each other in a fixed position necessary for the structural integrity of the overall chandelier frame.

2. *Application*

I need not explore the outer boundaries of my construction of element B, insofar as Wilshire does not dispute that the spokes of its Versailles frames function in relation to the top inner ring just as the spokes of the '805 patent embodiment depicted at Figures 17 and 18 function in relation to the inner rings that bear their weight. Indeed, the spokes of the Versailles frames are even more necessary for maintaining the structural integrity of the overall chandelier frame, where the lower inner ring is otherwise unattached from above (in the '805 patent embodiment, the lower inner ring is attached to the central column).

Accordingly, I find that Wilshire's Versailles frames read upon element B of claim 1 of the '805 patent.

C. *Element C of Claim 1*

1. *Construction*

Element C of claim 1 concerns "mechanical interengagement means" for the purpose of "aligning the rings and spokes with respect to one another." The parties do not dispute that this element is written in means-plus-function form, and as such is limited, under 35 U.S.C. s. 112, para. 6, to corresponding structure disclosed in the '805 patent's specification, and equivalents thereof. *See, e.g.,* Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc., 145 F.3d 1303, 1307-08 (Fed.Cir.1998); *see also* In re Donaldson Company, Inc., 16 F.3d 1189, 1194-95 (Fed.Cir.1994).

The parties also do not dispute that the structure disclosed in the patent specification for this element is that of interengaging tabs and slots, precision cut (e.g. by laser) at predetermined locations on the rings and spokes. *See* '851 patent, column 4:5-30. According to the patent specification, the "positive mechanical interengagement" thereby permitted between the rings and the spokes-prior to fastening of these parts to one another-represents a significant improvement over the prior art because it enables the overall chandelier frame to be both precisely and quickly assembled. *Id*. In particular, the patent specification states that predefining overall frame alignment by means of interlocking tabs and slots, before the respective parts are fastened, can eliminate-or at least substantially reduce-the need to use distortion-inducing and labor-intensive "welds, eyelets, screws or rivets" as fastening mechanisms. *Id.,* column 3:31-40; column 4:23-25; column 6:15-22.

2. *Application*

Wilshire concedes that the rings and spokes of its Versailles frames feature interengaging tabs and slots that permit alignment of the frame prior to fastening of the parts, just as disclosed for the "interengagement means" of claim 1 of the '805 patent. Wilshire has sought to discount this commonality by arguing that a similar tab/slot mechanism was utilized by a product Wilshire itself sold in 1978-well before the '805 patent was issued-such that element C cannot be deemed to disclose any structure "unique or novel." Even crediting this contested assertion, however, I observe that Wilshire does not suggest that claim 1 as a whole ought to be declared invalid, and offers no support for the proposition that an accused product that literally reads upon each of the elements of a valid patent claim may be judged non-infringing if one of those elements were to disclose structure found in the prior art. Perhaps reflecting the weakness of this proposition, Wilshire did not further the argument in any briefing subsequent to its original memorandum in support of its cross-motion for summary judgment.

Accordingly, I find that Wilshire's Versailles chandelier frame reads upon element C of claim 1 of the '805 patent.

D. *Element D of Claim 1*

1. *Construction*

Element D of claim 1 concerns "locking means" for "mechanically and detachably locking the rings and spokes" after the overall chandelier frame has been predefined by the interengagement means. Again, I look to the '805 patent's specification to determine the meaning of this means-plus-function element. In the first instance, the corresponding structure most prominently disclosed is that of "twist tabs," a configuration in which the upper portions of the tabs providing interengagement between the rings and spokes are "twisted out of alignment with the slot[s] to contact the surfaces ... on opposing sides of the slot." '851 patent, column 4:37-43. The manner of operation is visually displayed at Figures 4 through 6, and is recorded in its own claim (claim 25). The patent specification presents this locking mechanism as permitting especially "quick

and simple" assembly, and resulting in "only small isolated points" of stress on the finished chandelier frame. Id., column 4:43-52.

At the same time, the specification explicitly notes that other locking mechanisms are possible, and in fact "may be required" for chandelier parts made out of certain materials, or to achieve certain aesthetic goals. Id., column 6:8-10; column 8:46-50. The specification goes on to disclose two additional locking mechanisms for fastening circularly arrayed spokes to an inner ring (that would likely, though perhaps not necessarily, be the center plate that hangs from the ceiling). The first, depicted at Figure 14, involves fastening the spoke tabs into the ring slots by means of a central "locking disk" bringing *downward* pressure on spokes slotted into the ring, and held in place by a single bolt running through its center. Id., column 8:59-9:21. The second, depicted at Figures 15(a) and 15(b), involves a similar central locking disk that brings *sideways* pressure preventing inward lateral movement by spokes inserted and then, by virtue of this particular design, slid radially outward through the ring slots. Id., column 9:22-42.

Prefacing the specification's disclosure of these additional locking means is an acknowledgement that mechanisms other than the twisted tab approach may involve some use of "welding, adhesives, or other techniques of joinery," but that "significant advantage over the prior art" is maintained by the more precise and quick assembly permitted by the tab/slot interengagement means. Id., column 6:15-24. In supplemental briefing, Schonbek draws on such language to suggest that the locking means of element D are subordinate to the interengagement means of element C, such that it is minimally relevant, for purposes of the '805 patent, what precise locking means are chosen to fasten a frame predefined by the interengagement means. I decline to adopt so broad a construction of element D, noting that even the two Federal Circuit cases Schonbek cites in support constrain analysis of the particular means-plus-function elements respectively at issue, as statutorily mandated, to structure disclosed in the patent specification and (meaningful) equivalents thereof. IMS Technology, Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1435-37 (Fed.Cir.2000); *Al-* Site Corporation v. VSI International, Inc., 174 F.3d 1308, 1319-21 (Fed.Cir.1999).

Accordingly, I will consider whether Wilshire's Versailles chandelier frame features a locking mechanism that is the same as, or under the analysis delineated by the Federal Circuit, equivalent to the twisted tab and locking disc structures disclosed for element D in the '805 patent's specification.

2. ***Application***

The parties agree that Wilshire's Versailles frames do not in fact employ a twisted tab or locking disc mechanism. Rather, each spoke of a Versailles frame is fastened to an inner ring, after predefinition through tab/slot interengagement, by means of an individual bolt and nut combination. The question presented, then, is whether this bolt and nut locking mechanism can be deemed equivalent to any of the structures disclosed for the locking means of element D.

Before reaching that question, however, I must first address Wilshire's argument that militating against a finding of such equivalency is the prosecution history of another one of Schonbek's patents, namely U.S. Patent No. 5,255,173 (the " '173 patent"). The prosecution history of the '173 patent shows that, in its July 1991 Amendments submitted to the patent examiner, Schonbek amended claim elements directed at a locking mechanism very much like that depicted at Figures 15(a) and 15(b) of the '805 patent-employing a central locking disk exerting sideways pressure against inward lateral movement by "arms" slotted through a "plate"-to clarify the particulars of that mechanism and eliminate the means-plus-function language in which the claim elements originally were cast. In proposing this amendment, Schonbek explicitly

distinguished the particular locking mechanism claimed from the "separate nut for every arm" approach it acknowledged to be known in the prior art. The '173 patent's prosecution history, concludes Wilshire, should undermine Schonbek's current attempt to include the bolt and nut approach within the scope of the locking means of element D of the '805 patent.

Wilshire's argument faces two difficulties. First, by its own admission, its further research (requested by me) has failed to unearth any caselaw granting preclusive effect to the prosecution history of a patent not in suit FN4 (hence leading it to withdraw its original claim of prosecution history estoppel). Second, insofar as Wilshire contends the recited prosecution history of the '173 patent should limit, if only by force of persuasion, what I might find to be equivalent to the structures disclosed for element D of claim 1 of the '805 patent, Wilshire entirely overlooks the fact that the claim language of the '173 patent was amended to focus specifically on a particular locking mechanism which is only one of the three disclosed in the '805 patent's specification (for an element that, by contrast, is cast in broad means-plus-function form). Accordingly, even were the prosecution history of the '173 patent to influence me to find a bolt and nut locking mechanism not to be equivalent, for present purposes, to the central locking disk depicted at Figures 15(a) and 15(b) of the '805 patent, or further, to the comparatively novel central locking disk depicted at Figure 14, I am still obligated independently to consider whether a bolt and nut locking mechanism is equivalent to the twisted tab approach depicted at Figures 4 through 6.

FN4. Wilshire's research has only disclosed the Federal Circuit's endorsement of the comparatively unremarkable propositions that prosecution history estoppel might arise as to the scope of a given claim by virtue of statements made (i) about other claims within the same patent, Haynes International Inc. v. Jessop Steel Company, 8 F.3d 1573, 1578-79 (Fed.Cir.1994), Hormone Research Foundation, Inc. v. Genentech, Inc., 904 F.2d 1558, 1564 & n. 9 (Fed.Cir.1990), or (ii) in application to a foreign patent office for the same invention. Tanabe Seiyaku Co., Ltd. v. United States International Trade Commission, 109 F.3d 726, 733 (Fed.Cir.1997).

The Federal Circuit has outlined the following guidelines for determining equivalence within the limited context of 35 U.S.C. s. 112, para. 6 (such as might support an overall finding of literal infringement): First, in "a reduced version of the well-known tripartite test for the doctrine of equivalents," it must be determined whether the accused structure "performs the identical function" as the structure disclosed by the patent specification for the means-plus-function element in question, and then, whether it performs that function "in substantially the same way to achieve substantially the same result." FN5 IMS Technology, 206 F.3d at 1435. Second, "evidence of known interchangeability between structure in the accused device and the disclosed structure" is to be accorded weight. *Id*. Finally, the "context of the invention should be considered," because a broader range of equivalent structures might be available when the physical structure disclosed for a given element "is of little or no importance to the claimed invention," than when "the physical characteristics of the structure are critical in performing the claimed function...." *Id*. at 1436.

FN5. As the Federal Circuit noted, this inquiry is sufficiently flexible as to permit a finding of equivalency of structures, for purposes of s. 112, para. 6, even in the absence of structural equivalency. IMS Technology, 206 F.3d at 1436 n. 3.

In applying these principles to my present analysis, I find it most helpful to focus on the twisted tab locking mechanism disclosed by the '805 patent rather than the two forms of locking disks. This is largely because

the '805 patent specification states that the chandelier frame depicted at Figures 17 and 18-featuring an array of scrolled spokes borne by two inner rings, similar to Wilshire's Versailles frames-is fastened by means of twisted tabs. '851 patent, column 11:12-37.

It is apparent that a bolt at each arm performs the same basic function as twisted tabs (and, for that matter, central locking disks)-namely, to fasten the various parts of a chandelier frame together. My inquiry turns, then, to whether a bolt at each arm performs that function, for purposes of the '805 patent, "in substantially the same way to achieve substantially the same result" as, in particular, twisted tabs.

I do find it instructive in this regard that, as the prosecution history of the '173 patent makes clear, a bolt and nut approach was known in the prior art, and specifically by Schonbek. I also credit Schonbeck's uncontested assertion that it has substituted bolts for tabs in the actual construction of frames that correspond to Figures 17 and 18 of the '805 patent (and Wilshire's Versailles model). *See* Caterpillar Inc. v. Deere & Company, 224 F.3d 1374, 1380 (Fed.Cir.2000). Finally, I recognize that the '805 patent specification provides that certain materials may require locking means-like "welding, adhesives, or other techniques of joinery"-that might induce some degree of distortion and/or detract from quick assembly, as compared with twisted tabs. This provision seems to have anticipated the Federal Circuit's observation that 35 U.S.C. s. 112, para. 6 "requires two structures to be equivalent, but it does not require them to be 'structurally equivalent,' *i.e.* it does not mandate an equivalency comparison that necessarily focuses heavily or exclusively on physical structure." IMS Technology, 206 F.3d at 1436.

The simple example noted by *IMS Technology* court is directly on point. In an invention which claims a " 'means for securing parts A and B together in a fixed relationship" ' with a specification that discloses "that parts A and B are made of wood and are secured together by nails, ... it does not matter how parts A and B are secured; nails are not a critical part of the invention." This is because while "[a] screw is not a nail, but for purposes of s. 112, para. 6, it is equivalent structure in the context of the invention, though it is not the 'structural equivalent' of a nail." *Id*. at n. 3.

Nevertheless, I find there to be a genuine issue of material fact as to whether the bolt and nut approach of Wilshire's Versailles frames is equivalent to the structure disclosed for element D of claim 1 of the '805 patent, because the record before me does not permit resolution as a matter of law of the question of the degree of distortion induced by and labor required for separately bolting each spoke to the ring. As made clear throughout its specification, the '805 patent aims to reduce both, rendering these factors highly relevant to any equivalency analysis. Whether there is such functional interchangeability between the bolt and nut locking mechanism of Wilshire's Versailles chandeliers and the structure disclosed for the locking means of claim 1 of the '805 patent as to support infringement of the '805 patent by Wilshire's chandeliers is a matter for a fact finder. Thus, despite the presentation and resolution of the remaining issues in this case for disposition on cross-motions for summary judgment, the limited issue of equivalency as to element D of claim 1 must be resolved at trial.

III. Conclusion

For the reasons set forth more fully above, I hereby DENY the parties' respective motions for summary judgment. The case shall be reset for trial on the question whether the Wilshire bolt and nut locking mechanism is equivalent structure to the locking mechanism literally disclosed in the '805 patent. The parties shall appear for a status conference on April 22, 2002, at 3 p.m. to schedule further proceedings in this case in advance of which they shall submit by no later than 12 noon April 15, 2002 a joint status report

containing any proposal(s) for such further proceedings.

D.Mass.,2002.
Schonbek Worldwide LIghting, Inc. v. American Lighting Fixture Corp.