

United States District Court,  
N.D. Illinois.

**ASHLAND PRODUCTS, INC., a Delaware Corporation,**  
Plaintiff.

v.  
**RO-MAI INDUSTRIES, INC., an Ohio Corporation,**  
Defendant.

**Aug. 17, 1999.**

### **MEMORANDUM OPINION AND ORDER**

**MANNING, J.**

**SCHENKIER, Magistrate J.**

This is a patent infringement case brought by plaintiff, Ashland Products ("Ashland"), against defendant, Ro-Mai Industries ("Ro-Mai"), alleging infringement of United States Patent No. 5,139,291 (the "'291 patent"). Ro-Mai, of course, denies infringement and asserts the defense, *inter alia*, that the patent is invalid. However, the parties have agreed that before questions of validity and infringement can be addressed, the Court first must resolve their conflicting constructions concerning Claim 1 of the '291 patent-which, under *Markman v. Westview Instruments*, 517 U.S. 370 (1996), is a question of law for the Court.

To that end, the parties submitted briefs in support of their respective proposed construction of Claim 1 of the '291 patent. During the course of that briefing, Judge Coar issued his construction of Claim 1 of the '291 patent in a separate case, *Ashland Products, Inc. v. MEC Technologies*, 1999 WL 184652 (N.D.Ill.). As a result, the parties requested leave to submit amended memoranda in light of Judge Coar's decision. Because Judge Coar's construction addresses some of the terms disputed in this case, this Court granted leave to amend. The parties have submitted their amended memoranda (which supersede their earlier memoranda), FN1 and this Court heard oral argument on the motion on July 1, 1999. FN2

FN1. Plaintiff's Consolidated Memorandum in Support of its Construction of Claim 1 shall be cited as Pl.'s Mem. at \_\_; Defendant's Amended Memorandum in Support of its Proposed Construction of Claim 1 shall be cited as Def.'s Mem. at \_\_.

FN2. At a status conference on May 19, 1999, the parties agreed that resolution of this claim construction issue did not require the submission of testimony, or of evidence other than that submitted with the briefs.

By an order dated May 7, 1999, the district court referred this construction issue to this Court for decision.

The Court's construction of Claim 1 of the '291 patent follows, beginning with a brief explanation of the patent in issue.

## I.

The '291 patent discloses a tilt-latch to be used in a pivotal sash window assembly, shown in Patent Figure 1 (from Pl.'s Mem. Ex. A, Patent, Figure 1, reproduced in the left margin). A sash window assembly has a top (the "top sash rail"), a bottom (the "base"), and two sides (the "stiles") (Fig. 1, elements 20, 22, and 24, respectively). The window assembly slides vertically in the window frame on two guide rails (Fig. 1, element 16). The base of the window assembly contains pivots (Fig. 1, element 15), while the top sash rail contains the tilt-latches (Fig. 1, element 10). The tilt-latches can be disengaged from the guide rails by moving the latch bolts, which allows the window to pivot about its base and thus facilitates installation and cleaning. Tilt-latches are generally installed in the top sash rail by machining a slot in the top sash rail and snapping or sliding the latch into place (Pl.'s Mem. Ex. E; *see* Patent Figure 2, reproduced below). The opposing edges formed by the slot are called the header rails (Fig. 2, elements 36, 38).

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The '291 patent states that the inventor (an employee of Ashland), developed the tilt latch to improve upon a prior-art tilt latch (the "prior-art latch") (Patent, Col.1, Ins.67-68). The prior-art latch disclosed in the patent was sold by Ro-Mai, and is shown in Figure 5 of the patent (reproduced below). FN3 The prior-art latch consists of a latch housing, which has a set of side walls, a rear wall, a cover and a base ( *see* Ro-Mai's Prior-Art Rendering, hereafter "Prior Art Fig."). The housing cover of the prior-art latch overhangs each of the side walls slightly (Prior Art Fig., element 3). There is a single flared tab on the front of each of the side walls (Prior Art Fig., element 1), and another tab on the rear wall (Prior Art Fig., element 4). The purpose of those tabs is to act in conjunction with the housing cover to secure the latch to the header rail. The prior-art latch also has a "bump" on the bottom of the latch housing (Prior Art Fig., element 6), which is intended to engage the "stile" (which is the side of the window- *see* Patent Figure 1, element 24) and to prevent longitudinal movement of the latch.

FN3. Ro-Mai asserts that Figure 5 in the '291 patent does not fully show the characteristics of its prior art latch (Def.'s Mem. at 2), and has offered its own rendering which it asserts is more complete and accurate (Def.'s Mem., Ex. A, Figs. A-C). In the interests of clarity and completeness, we reproduce above "Ro-Mai's Prior-Art Rendering." The Court has reviewed these drawings, as well as samples of the latches supplied by the parties. The Court finds that quibbles about the completeness of Figure 5 in the '291 patent are not material to the claim construction issues decided today.

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The '291 patent states that this Ro-Mai prior-art latch "is difficult to assemble and tends to disengage from the [top] sash [rail]" (Patent, Col.1, Ins.65-66). By the invention claimed in the '291 patent, Ashland sought, among other things, to solve the problem of disengagement (Pl.'s Mem. at 4; *see also*, Patent, Col. 1, Ins. 67-68). Ashland's design consists of a housing which also has a cover, two side walls, a base, and a rear wall ( *see* Patent Fig. 2 reproduced on prior page). Like the prior-art latch, the housing cover overhangs each of the side walls slightly. However, the '291 patent replaces the flared tabs of the prior-art latch with a longitudinal rail on each side wall which, in the preferred embodiment, runs the length of the side wall (Patent Fig. 2, element 62). According to Ashland, this side wall rail works in conjunction with the

overhang of the housing cover to form a groove on each side wall ( e.g., Patent Fig. 2, element 64) that holds on to the header rails (Patent Fig. 2, elements 36, 38) along the length of the side wall. Ashland claims this provides a more secure fit in the top sash rail than was afforded by the tabs used in the prior-art latch, and thereby addresses the problem of unintended disengagement of the latch from the top sash rail (Pl.'s Mem. at 4). The '291 patent also discloses a "tab" as a "means for engaging the stile" (Patent Fig. 3, element 68, reproduced to the right). This tab corresponds to the "bump" on the prior-art latch, which sought to prevent longitudinal movement.

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Claim 1 of the '291 patent states:

For a pivotal window sash adapted for installation in a master frame of a sash window assembly having opposed, vertically extending guide rails to enable vertical reciprocal sliding movement of said sash window in said master frame while cooperatively engaged with said guide rails, said window sash having a top sash rail, a base and a pair of stiles cooperatively connected together at adjacent extremities thereof to form a rectangular sash frame, said top sash rail including a pair of opposing header slots, each of said header slots having a pair of opposing, longitudinal header rails, a pre-assembled pivot latch adapted for substantially flush installation in one of said header slots for releasably securing said window sash to said master frame to permit pivotal movement of said sash, said latch comprising:

a housing having an outward end opening;

a latch bolt disposed within said housing;

means for biasing said latch bolt outwardly through said outward end opening and having a nose portion adapted for engaging a respective one of said guide rails, wherein said housing has a cover and a pair of side walls depending from said cover, *each of said side walls forming a longitudinal groove adapted to cooperatively receive a respective pair of said header rails, said housing further including means for engaging said respective one of said stiles.*

(Patent, Col.4, Ins.36-64) (emphasis added).

## II.

This is not the first case to confront questions concerning the meaning of Claim 1 of the '291 patent. In *Ashland Products, Inc. v. MEC Technologies*, 1999 WL 184652 (N.D.Ill.), Judge Coar was presented with the question of "whether or not a groove must be continuous to be a groove." *Id.*, at \*1. Judge Coar found that there was no language in Claim 1 that required a continuous groove; that the preferred embodiment disclosed in the specification of the '291 patent should not be read to limit Claim 1; and that the prosecution history shed no additional light on that construction question. *Id.*, at \*3-4. As in this case, the parties conceded that an examination of extrinsic evidence was not necessary. *Id.*

Based on his review, Judge Coar construed the phrase "longitudinal groove adapted to cooperatively receive a respective pair of said header rails" to mean the following:

A recess formed along the exterior side of each of the side walls which receives a respective one of the opposed header rails along the length of the housing, wherein each of the recesses is defined by two spaced

recess walls which cooperate to receive one of the header rails, and each of the recess walls is defined by one or more projections which extend substantially along the length of the side wall.

MEC, 1999 WL 184652, at \* 5. Judge Coar concluded that the groove need not be continuous, so long as the groove is formed by "one or more projections that extend substantially along the length of the side wall." *Id.*, at \* 5. He based this construction in part on his finding that "the benefits of the patented design can be gained from a non-continuous wall, as long as the walls are significantly longer than the flare[d] tabs of the prior art Ro-Mai design." *Id.*, at \* 4.

### III.

The claims set forth in a patent define the scope of the invention that is protected. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed.Cir.1985). Thus, the claims determine what the patent holder can prevent others from making. *AbTox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed.Cir.1997). Before a claim for infringement or invalidity can go before the trier of fact, however, a court must first determine the proper construction of the patent claims as a matter of law. *Markman v. Westview Instruments*, 52 F.3d 967, 976 (Fed.Cir.1995) (en banc), *aff'd* 517 U.S. 370, 372 (1996). Claim construction is "the process of giving proper meaning to the claim language." *AbTox*, 122 F.3d at 1023. When interpreting claim language, a court may consider three types of intrinsic evidence: the claims, the specification, and the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

The first step of claim construction is to examine the claim language, *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1579 (Fed.Cir.1988), which should be interpreted as one skilled in the art would interpret it. *Smithkline Diagnostics, Inc. v. Helena Laboratories, Corp.*, 859 F.2d 878, 882 (Fed.Cir.1988). Because the specification may shed light on the meaning given to a word by the patent holder, a court must read the claims in conjunction with the specification to determine if any words have been used in a manner inconsistent with their ordinary meaning. *Id.* The patent holder may act as his own lexicographer and provide special definitions for words "as long as the special definition of the term is clearly stated in the patent specification or file history." *Vitronics*, 90 F.3d at 1582. In the absence of a clearly-stated special definition, the court must give words of a claim their "ordinary and customary meaning." *Id.*

The court may also examine the prosecution history. *Id.* The prosecution history may reference prior art, shedding light on what the claims were intended (or were not intended) to cover. *Id.* at 1583. The prosecution history also may contain evidence of interpretations that were "disclaimed during prosecution" or rejected by the patent office. *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed.Cir.1995).

Where the claim language, specification, and prosecution history fail to resolve an ambiguity, a court may receive extrinsic evidence in order to determine how to interpret terms. *Vitronics*, 90 F.3d at 1583. Extrinsic evidence includes expert testimony, inventor testimony, dictionaries, treatises, articles, and prior art not found in the file history. *Id.* at 1581-82. Dictionaries, however, are a form of extrinsic evidence that a court may consult at any time. *Id.* at 1584 n. 6.

A court must be careful not to limit claims merely to avoid invalidity or escape infringement. *United States v. Telectronics, Inc.*, 857 F.2d 778, 783 (Fed.Cir.1988). While a court should construe ambiguous claim terminology so as to be valid in light of prior art, it can only do so to the extent that the prior art illustrates what was not claimed. *Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 871 F.2d 1054, 1065.

Furthermore, the existence of a preferred embodiment disclosed in the specification is not ordinarily a claim limitation. *SRI Int'l*, 775 F.2d at 1121; *Transmatic, Inc. v. Gulton Indus., Inc.*, 53 F.3d 1270, 1277 (Fed.Cir.1995); *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 865 (Fed.Cir.1988), *cert. denied*, 490 U.S. 1068 (1989); *Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 805 F.2d 1558, 1563 (Fed.Cir.1986). On the other hand, a court "can not broaden claims beyond their correct scope." *Multiform Desiccants v. Medzam, Ltd.*, 133 F.3d 1473, 1479 (Fed.Cir.1998). Where claim language is ambiguous, a court should resolve the ambiguity against the patentee. *Ethicon Endo-Surgery v. United States Surgical Corp.*, 93 F.3d 1572, 1581 (Fed.Cir.1996).

With these principles in mind, the Court now turns to an analysis of the three claim construction issues raised.

### **A. *The "Side Walls"***

In its memorandum, Ro-Mai argues that the phrase "a pair of side walls depending from said cover" is ambiguous because it does not specify where the side walls end and the rear wall begins (Def.Mem.6-8). However, during oral argument, it became clear that there was no genuine dispute between the parties as to the meaning of the phrase "side walls." At the Court's suggestion, the parties consulted and agreed to a stipulation that will govern the meaning of the term "side walls" in this litigation, which reads as follows:

a pair of spaced structures which define the interior and the exterior of opposing sides of the housing, each side wall beginning at the outward end opening and ending at an arcuate rear wall.FN4

FN4. The parties also included in the stipulation a drawing which we reproduce in the conclusion of this opinion.

The Court adopts this stipulation as to the meaning of the term "side walls."

### **B. *The "Groove"***

The parties dispute the meaning of the phrase in Claim 1 that states " *each of said side walls forming a longitudinal groove adapted to cooperatively receive a respective pair of said header rails*" (Pl.'s Mem. at 2; Def.'s Mem. at 6-7) (emphasis added). The parties agree that the "groove" referred to in this phrase is the recess (Patent Fig. 2, element 64) created between the overhang of the cover (Patent Fig. 2, element 50) and one or more projections on the side wall (also known as the side wall rail) (Patent Fig. 2, element 62). FN5 Both parties also agree that the groove does not have to be "continuous" to fall within the scope of the patent: that is, they agree that it need not extend for the full length of the side wall (Pl.'s Mem. at 9-10; Def.'s Mem. at 8-9). The parties disagree, however, on two specific points: they dispute what portions of the recess can properly be called a "groove," and how far the projections must extend along the side wall.

FN5. Judge Coar used the term "projections" to describe the side wall rail, which is the structure forming the bottom side of the groove. This structure has also been defined as a "surface" in some of the briefs. For the purposes of this opinion, the word "projections" will be used.

Ashland contends that the length of the groove is to be measured from the beginning of the first projection to the end of the last projection, regardless of the number or size of the gaps in between. As to the length of

the groove, Ashland advocates adoption of Judge Coar's construction, which Ashland reads as saying that the groove must extend "substantially" the length of the side wall. Ashland further argues that what is "substantially" is a question of fact for the jury and not of law for the Court.

Ro-Mai, on the other hand, contends that the length of the groove must be measured by adding the aggregate length of each of the projections, and that gaps between the projections on the side walls must be disregarded in making that calculation. As to what is "substantial," Ro-Mai urges a construction that would require the groove (and thus the projections) to extend three-fourths of the length of the side wall.

In resolving these disputes over construction, the Court follows the teaching of *Markman* and considers in turn the claim language, the specifications, the prosecution history, and any extrinsic evidence.

### **1. *The Claim Language.***

Claim 1 of the '291 patent describes an invention containing a "longitudinal groove adapted to cooperatively receive a respective pair of said header rails." The phrase "adapted to cooperatively receive a respective pair of said header rails" is not disputed, and simply means that the groove (the subject of the sentence) is positioned and formed in a manner that it can accept the header rail. Nor do the parties contest the meaning of the term "longitudinal." The plain and ordinary meaning of the term "longitudinal" is "placed or running lengthwise." *Merriam Webster's Collegiate Dictionary* 687 (10th ed). Both parties agree that the groove runs lengthwise along the latch. Thus, the sole term being disputed is the term "groove." The plain and ordinary meaning of "groove" is "a *long*, narrow channel or depression." *Webster's*, at 514 (emphasis added).

The claim language, however, is silent as to how to measure the length of the groove in the event that there is one projection on the side wall that does not run the full length. Likewise, the claim language provides no guidance on how to measure the length of the groove if it is formed by two or more discontinuous projections. Nor does the claim language state how far the groove must extend along the length of the side wall to fall within the patented invention. Thus, we turn to the specification to attempt to glean further understanding on these points.

### **2. *The Specification.***

The specification sheds little light on the intended meaning of the word "groove." Nothing in the patent specification indicates that the term "groove" is being used in a manner inconsistent with its ordinary meaning. The preferred embodiment of the latch disclosed in the patent specification has a groove created by a continuous projection on each side wall (Patent Fig. 2, element 62). It is clear from the specification that the purpose of the groove is to better engage the header rail; the implicit assumption is that the longer the groove, the more securely the latch will be retained. Moreover, the specification notes that by the use of a groove (that is, a "long, narrow channel"), Ashland sought to differentiate its invention from the Ro-Mai prior-art latch, which used a small, single tab as the sole means of engaging the header rail at the side wall of the latch.

However, as Ashland correctly points out, the preferred embodiment should not be read to limit the claims. *SRI Int'l*, 775 F.2d at 1121. An inventor is not required to disclose every possible embodiment of his invention. *Id.* The preferred embodiment—a continuous groove extending the full length of the side wall—is one way of achieving the differentiation from the Ro-Mai prior art, and the attendant benefits of the invention claimed by the '291 patent. But, as Ro-Mai admits, it is not the only way.

In the situation where the projections creating the groove are non-continuous (or there is a single projection that is shorter than the full length of the side wall), the Court agrees with Ro-Mai that no "groove" is created where there is an absence of projections to create a recess with the cover. Put another way, literally speaking, a groove is not created where there is no projection to create the groove. The Court believes that this construction is consistent with the specification, which indicates that the intent of the '291 patent was to provide a means of engagement that improved upon the tab used by Ro-Mai. As Ashland admitted in oral argument, its proposed construction-which would include the space (or "gaps") between the projections in calculating the length of the groove-would bring within the patent a latch with two tabs positioned at the far ends of the side wall (Def.'s Mem., Ex. C, Fig. H, reproduced to the right), even if those projections were collectively only slightly longer than the Ro-Mai prior-art tab.

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Ashland's definition is in direct conflict with the plain and ordinary meaning of the word "groove"-Figure H simply does not literally present a "long, narrow channel or depression." The Court finds that this aspect of Ashland's proposed construction would extend the patent beyond its literal scope, and thus rejects Ashland's proposed construction on this point in favor of that offered by Ro-Mai.

However, we reach a different result on the issue of how far the groove (and thus the projections) must extend along the side wall. Neither the claim nor the specification support Ro-Mai's attempt to place a fixed numeric limit (75 percent or otherwise) on the length of the groove-or on the length of the projections needed to create the groove. We agree with Judge Coar's observation that "the benefits of the patented design can be gained from a non-continuous wall, as long as the walls are significantly longer than the flare[d] tabs of the prior art Ro-Mai design." MEC, 1999 WL 184652, at \*4. As Ashland correctly points out, what constitutes "substantially the length of the side wall" is a question of fact that should be left for the trier of fact. *Markman*, 517 U.S. at 384. If courts were to set out such strict constructions of patent claims, juries would function as mere rubber stamps in infringement cases; there would be no need for the jury at all. While patent claims do need to be sufficiently clear to allow competitors to know what is patented, there is no case law to support Ro-Mai's assertion that absolute mathematical precision is required here. *See Vitronics*, 90 F.3d at 1583 (competitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee's claimed invention and, thus, design around the claimed invention).

### ***3. The Prosecution History and Extrinsic Evidence.***

Both parties agree that the prosecution history does not contain any information relevant to the construction of Claim 1 (except for some minor changes, the patent was accepted as filed). Other than the dictionary definitions discussed above and the samples of latches submitted by the parties, the Court does not find any extrinsic evidence, except for a dictionary, helpful in construing the claims-and the parties have pointed to none.

\* \* \*

Therefore, upon consideration of the relevant intrinsic and extrinsic evidence, we adopt Ashland's proposed construction that requires-as Judge Coar also has held-that the projections "extend substantially along the length of the side wall." MEC, 1999 WL 184652, at \*5. However, as we discussed above, we emphasize that it is the projections themselves (and not the gaps between them) that literally create the groove, and that

must extend substantially along the length of the side wall.

### ***C. The "Means for Engaging the Stile."***

The parties also dispute the meaning of the phrase "said housing further including means for engaging said respective one of said stiles" (Patent, Col.4, lns.62-64). This phrase is written in a "means-plus-function" format. A means-plus-function claim encompasses the corresponding structure described in the specification and equivalents thereof. 35 U.S.C. s. 112 para. 6. A court construes a means-plus-function claim by determining what function is performed by the element and the literal meaning of the description of the structure (usually provided in the specification). *Multiform Desiccants*, 133 F.3d at 1479, *citing* *Markman*, 52 F.3d at 979-81. The trier of fact then determines what structures are equivalent to the structure described in the specification. *Motorola v. Interdigital Tech. Corp.*, 930 F.Supp. 952, 962-64 (D.Del.1996), *aff'd in part & rev'd in part*, 121 F.3d 1461 (Fed.Cir.1997).

The patent specification states that the "housing 42 also includes a depending tab 66 for engaging the inner surface 68[of] a respective one of the stiles 24, 26" (Patent, Col. 3, ln. 68 to Col. 4, ln. 2). Figure 3 of the patent (reproduced at page 4, *supra*) discloses a tab hanging down from the base of the housing, with a dotted line indicating that the tab is "cutout" from the housing (Patent Fig. 3, element 66).

Ro-Mai contends that the disclosed structure is a *flexible* tab and that this is the only type of structure that the means-plus-function element literally covers. Ro-Mai argues that where the patentee has disclosed only the preferred embodiment, the means-plus-function element should be construed only to cover that structure and any equivalents thereof (Def.'s Mem. at 16). Ro-Mai further argues that Ashland stated in the patent that the "bump" on the prior-art latch was inadequate (*id.*), and thus the "bump" cannot be a structural equivalent of Ashland's new design. In support of its argument, Ro-Mai relies heavily on *Signtech USA Ltd. v. Vutek Inc.*, 174 F.3d 1352 (Fed.Cir.1999).

*Signtech* involved a patentee who had developed an improved method for printing signs. *Id.* at 1354-1355. One of the improvements emphasized throughout the patent was a second air source that kept the ink nozzle clean. *Id.* The patentee then accused a competing design, which had only one air source, of infringement. *Id.* at 1355. The claim language described the nozzle as a means-plus-function claim, and the court construed the patent to require two air sources, because the second air source was emphasized as one of the patent's central improvements. *Id.* at 1356-58.

*Signtech* is clearly distinguishable from the case at hand. *First*, neither the claim, nor the specification, nor the prosecution history of the '291 patent ever describes or identifies the tab as flexible. The tab is described as a "depending" tab which engages the inner surface of one of the stiles (Patent, Col.4, lns.1-2). One of the dictionary definitions of "depend" is "to hang down." *Webster's*, at 310. In the context of the '291 patent, that is clearly the meaning intended for that word (*compare* Patent, Col. 3, lns. 61-64, which states that the side walls of the latch "depend" from the cover). This definition of "depending" does not connote "flexibility," and there is nothing that the Court finds in the patent or the prosecution history to indicate that Ashland acted as its own lexicographer by ascribing to the word "depending" a special meaning that includes "flexibility ." Moreover, while Figure 3 of the patent does indicate some sort of cutout, this falls short of clearly indicating that the tab disclosed in the patent is flexible.

*Second*, a "flexible" tab is not described as a central improvement over prior art. In fact, the tab is not described as an improvement at all. Ro-Mai argues that the patent language describes the "bump" as



incapable of performing its function (Def.'s Mem. at 17). But the Court finds that this is a strained reading of the following patent language:

Ro-Mai Industries, Inc. of Twinsburg, Ohio, has recently begun selling a flush mounted pivot latch for insertion in a hollow top sash of a sash window, as illustrated in FIG. 5. A slot is formed in each of the outer ends of the hollow top sash. The pivot latch has depending sidewalls. However, because the sidewalls are relatively thin, a pair of bosses 6 are required to provide a sufficiently stable surface to which to heat-stake a base 7. Flared tabs 8 are provided which extend outwardly from the sidewalls and the rear wall. The pivot latch is installed in the top sash by pushing it downwardly into the respective top sash slot until the tabs retainingly catch the top sash. A bump disposed on the base of the pivot latch reduces lateral movement of the pivot latch. *This pivot latch too is difficult to assemble and tends to disengage from the sash.*

(Patent, Col.1, lns.51-66) (emphasis added). Although the language in this paragraph could be clearer with respect to why the latch disengages from the sash, the discussion falls far short of claiming that the bump is incapable of performing its function. That language asserts that the latch as a whole is insufficient; it does not state that the bump itself is insufficient.

To the contrary, the claim and specification as a whole indicate that the principle improvement sought by the '291 patent is the reduction of disengagement caused not by the bump used on the prior-art latch, but by the allegedly inadequate tabs on the side walls. The function of the tab described in the '291 patent is to engage the stile in order to prevent longitudinal movement of the latch. The flexibility of a tab aids assembly (by making the latch easier to slide in), but does not in any way address the function performed by the tab once the latch is inserted. In other words, once the latch is assembled in the top sash rail, the tab (or "bump" used on the prior-art latch) need only to perform the function of engaging the inner surface of the stile in order to prevent the latch from sliding out longitudinally. This function could be performed by either a flexible or rigid tab. Thus, this Court adopts the following definition of the phrase "means for engaging said respective one of said stiles":

One or more projections extending from the housing to form an interference fit with the inner surface of the stile.

## CONCLUSION

For the reasons set forth above, the Court construes the terms of Claim 1 of the '291 patent at issue as follows:

1. By stipulation, the Court construes "side walls" to mean:

a pair of spaced structures which define the interior and the exterior of opposing sides of the housing, each side wall beginning at the outward end opening and ending at an arcuate rear wall. The juncture where the sidewall ends and the arcuate rear wall begins is representatively shown on the figure below.

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2. The Court construes "a longitudinal groove adapted to cooperatively receive a respective pair of said header rails" to mean:

a recess formed along the exterior side of each of the side walls which receives a respective one of the

opposed header rails along the length of the housing, wherein each of the recesses is defined by two spaced recess walls which cooperate to receive one of the header rails, and each of the recess walls is defined by one or more projections which extend substantially along the length of the side wall (any gaps between projections shall be disregarded in determining the length that the projections extend).

3. The Court construes "said housing further including means for engaging said respective one of said stiles" to mean:

One or more projections extending from the housing to form an interference fit with the inner surface of the stile.

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