United States District Court, E.D. Wisconsin.

ALLOC, INC., a Delaware corporation, Berry Finance N.V., a Belgian corporation, and V'e4linge Innovation AB (f/k/a V'e4linge Aluminum AB), a Swedish corporation,

Plaintiffs-Counterclaim Defendants.

v.

PERGO, LLC, a Delaware limited liability company,

Defendant-Counterclaimant.

No. 00-C-999

July 2, 2009.

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DECISION AND ORDER

RUDOLPH T. RANDA, Chief Judge.

This patent infringement action is before the Court for the construction of disputed claim terms in the asserted claims of U.S. Patent Nos. 5,860,267 (the '267 patent), 6,023,907 (the '907 patent), 6,182,410 (the '410 patent), 6,516,579 (the '579 patent), and U.S. Reissued Patent No. 39,439 (the RE '439 patent) (collectively the "patents-in-suit"). FN1 The parties briefed the terms and, on February 17, 2009, filed a joint comparison chart of the disputed claim terms.

FN1. At this juncture, the following patent claims are asserted in this action: claims 1-6, 8-15, and 17-42 of the '267 patent; claims 1-14 of the '907 patent (all claims of that patent); claims 1-5, 8, 9, 11-19, 21, 22, 24-32, 34, 37, 38, 39-42, 44, 48-55, 57, 58, and 61 of the '410 patent; claims 1-23, and 25-28 of the '579 patent; and claims 1, 4, 14, 16, 17, 21, 22, 33, 34, 37, 41, and 42 of the RE '439 patent. (Pergo's Open. Br. 1 n. 1; Minutes of Feb. 11, 2009, Scheduling Conference, 2.) However, at the March 3, 2009, *Markman* hearing in this action, the Plaintiffs' counsel stated that they will narrow the range of their asserted claims to about 20 within two weeks of the Court's issuance of this Decision and Order.

On April 3, 2009, the Court conducted a hearing regarding the parties' proposed constructions of the terms: (1) "locking means" in claims 1, 13, 14, 26, and 27 of the '410 patent, and "first locking means" and "second locking means" in claims 1, 10, 27, and 31 of the '267 patent; and, (2) "means for mechanically locking" in

claims 39 FN2 and 50 of the '410 patent, and "means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges together in a first direction at right angles to a principal plane of the panels" in claim 1 of the '579 patent. Thereafter, the parties submitted memorandum discussing the impact, if any, of ICU Medical, Inc. v. Alaris Medical, Inc., 558 F.3d 1368, 1374-1376 (Fed.Cir.2009) on the claim construction issues in this action. At this juncture, having carefully considered the submissions of the parties, the patents-in-suit, and the applicable law, the Court issues its claim construction decision.

FN2. As result of a typographical error, the Court's January 23, 2009, Order setting the *Markman* hearing refers to claim 49 of the '410 patent. The Order should have referred to claim 39 of '410 patent.

Background

Some background information provides essential context for the claim construction issues. The patents-insuit are related to locking systems for panels that can be joined by a mechanical lock, without the use of glue, and the methods by which such panels may be joined and installed. All five patents have the same specification and drawings and there is a significant overlap in the terminology used in the various claims.

The '267 and '907 patents are method patents for joining building boards. The '267 patent is for the angle-slide-snap mechanical joining method. The '907 patent is for the angle-slide-angle mechanical joining method. The '410, '579, and RE '439 patents are on systems for joining building boards. The '410 patent is generally directed to flooring systems and/or edge locks that have a snapping connection, corresponding to the '267 angle-slide-snap method. The '579 and RE '439 patents contain claims directed to a mechanical locking system for panels with various limitations but neither patent is specific to panels that are angled or snap together.

Plaintiff Valinge Innovation AB ("Valinge"), a Swedish corporation, is the assignee of the patents-in-suit, which are part of a patent family covering a method for assembling floor panels invented by Tony Pervan ("Pervan"). The five patents-in-suit have the identical specification and drawings as the Patent Cooperation Treaty ("PCT") application and claim priority to its April 29, 1994, filing date. The PCT patent was later issued as the '621 patent-the United States parent patent. The '267 patent is a division of the '621 patent. The '907 patent is a continuation of the '267 patent, and the '410 patent is a continuation of the '907 patent. The '579 patent is a continuation of the '907 patent, and the RE '439 patent is a reissue of the '621 patent.

Plaintiff Berry Finance N.V. ("Berry"), a Belgium corporation, was a licensee of Valinge, and Plaintiff Alloc, Inc. ("Alloc"), a Delaware corporation, was a sub-licensee of Berry in the United States. Valinge, Berry, and Alloc are collectively referred to as the "Plaintiffs."

Defendant Pergo, LLC ("Pergo"), a Delaware limited liability company, formerly known as Pergo, Inc., markets, sells and distributes laminate flooring products, including the accused products, in home improvement mass merchandise stores throughout the United States, including in Wisconsin.

Claim Construction Principles

Claim construction is a question of law for the Court. *See* Nystrom v. TREX Co., 424 F.3d 1136, 1141 (Fed.Cir.2005). The Court's construction of the claims is guided by Phillips v. AWH Corp., 415 F.3d 1303, 1312-25 (Fed.Cir.2005), which revisited the principles of claim construction and clarified prior case law

regarding the use of dictionaries in claim construction. See also, ICU Medical, Inc., 558 F.3d at 1373.

The Court's analysis begins with the claims of the patent. Phillips, 415 F.3d at 1312. The words of the claims in a patent are to be given the ordinary and customary meaning that would have been attributed to them by a person of ordinary skill in the art at the time the invention was made. Id. at 1312-13. A person of ordinary skill in the art is deemed to have read the term in the context of the entire patent, including the claims themselves, the specification, and the prosecution history. Id. at 1313. The claims, specification, and prosecution history are referred to as intrinsic evidence. *See* id. at 1313-14. As recently emphasized, "not only is the written description helpful in construing claim terms, but it is also appropriate 'to rely heavily on the written description for guidance as to the meaning of the claims.' " ICU Medical, Inc., 558 F.3d at 1373 (quoting Phillips, 415 F.3d at 1317).

"When multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation." Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 980 (Fed.Cir.1999). A statement regarding the scope of a claim in a later patent may be "relevant" to the claim construction of an earlier patent. Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1350 (Fed.Cir.2004).

Extrinsic evidence is everything "external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Phillips, 415 F.3d at 1317. Review of technical dictionaries and treatises can be helpful to the Court in understanding the technology of the invention and can assist the Court in determining the meaning of terms to those of skill in the art of the invention. Id. at 1318. Where extrinsic evidence conflicts with the intrinsic evidence of the patent, however, the intrinsic evidence controls. *Id.*

Impact of Prior Federal Circuit Alloc Decision on Claim Construction

The parties have presented many disputed terms for construction. The Plaintiffs indicate that a primary disputed category of terms are the limitations that Pergo relies upon in contending that the Court should read play into claims where it is not recited, including locking element, locking member, locking device, first locking means, second locking means, "locking surface ... configured," and "sufficient space." (Pls.' Open Br. 8.)

Specifically, Pergo asserts that Alloc, Inc. v. International Trade Commission, 342 F.3d 1361 (Fed.Cir.2003), requires that eleven terms call for play. The terms are: 1) locking means; 2) locking member; 3) locking groove; 4) locking element; 5) locking strip; 6) locking device; 7) locking surface; 8) second mechanical connection; 9) means for mechanically locking; 10) one way snap lock; and, 11) displacing, displaceable, and displacement. Pergo refers to elements one through ten as the "locking components," and to the terms of element 11 as the "displacement terms." (Pergo's Open. Br. 25-26.)

Pergo adopts the construction of other disputed terms advanced by Unilin Decor N.V. ("Unilin"), Unilin Flooring N.C. LLC and BHK of America (collectively the "Unilin Defendants") FN3 in their opening brief. (Pergo's Open. Br. 25.) Relying upon Texas Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1569 (Fed.Cir.1996), Pergo asserts that the Federal Circuit's *Alloc* decision regarding the '267, '410, and '907 patents is *stare decisis* as to those three patents, and at a minimum, it is highly persuasive as to the '579 and the RE '439 patents.

FN3. Pursuant to the stipulation of the Plaintiffs and the Unilin Defendants, the Court entered an order on April 20, 2007, dismissing with prejudice all the claims and counterclaims by the Plaintiffs and the Unilin Defendants against each other.

The Plaintiffs assert that Pergo erroneously relies on collateral estoppel. They also assert that *Alloc's* reasoning is no longer applicable because of three events not considered by the *Alloc* court: 1) the reexamination and re-issuance of the '621 patent as the RE '439 patent; 2) the issuance of the '579 patent in February of 2003; and, 3) the Patent Examiner ("Examiner") who handled all the patents-in-suit made it clear in March 2004, during the prosecution of Unilin's 6,874,292 patent (the '292 patent) that the patents-in-suit are not limited to systems with play.

Alloc addressed an appeal from a United States International Trade Commission ("ITC") decision in a patent infringement action filed by the Plaintiffs in 2000 relative to the '267 patent, the '907 patent, and the '410 patent. *See* Alloc, 342 F.3d at 1365-66. In *Alloc*, the court construed the claims to include a "play" limitation, although none of the asserted claims recited the term "play." *Id.* at 1372.

With respect to the import of *Alloc* on this Court's claim construction, Texas Instruments, 90 F.3d at 1568-69, reaffirmed that ITC determinations and the Federal Circuit Court of Appeals decisions in appeals from ITC decisions do not have preclusive effect. However, the court rejected the contention that denial of preclusive effects to those decisions would allow them to be ignored by district courts, and stated:

District courts are not free to ignore holdings of this court that bear on cases before them. Subsequent panels of this court are similarly not free to ignore precedents set by prior panels of the court.... As a court we are bound to follow our own precedents, and, to the extent that we have previously ruled on a matter, a subsequent panel will have powerful incentives not to deviate from that prior holding, short of thoroughly justified grounds.

Id. at 1569. While the sparse language provides limited guidance, the appellate court's statement suggests that district courts should be as deferential to Federal Circuit Court of Appeals decisions in appeals from ITC decisions as the appellate court expects its own subsequent panels to be and not deviate from the court's precedents absent "throughly justified grounds." See also, Alloc, Inc. v. Norman D. Lifton Co., No. 03 Civ. 4419(PAC), 2007 WL 2089303, at (S.D.N.Y. July 18, 2007) (holding that "the proper interpretation of Texas Instruments in the claim construction context is that a district court should afford Federal Circuit claim interpretation on appeal from the ITC a strong presumption of correctness, and deviate only where the party advancing an alternative interpretation provides compelling reasons to do so," and stating that compelling reasons might include evidence or arguments not presented to the Circuit panel or, in the rarest of cases, plain error on the face of the Federal Circuit opinion). Thus, the Court will review the Federal Circuit's analysis in Alloc. Then, the Court will consider whether the Plaintiffs have established "throughly justified grounds," for deviating from the Alloc precedent.

The *Alloc* court began by noting that the '907 specification FN4 describes "the invention" under the heading "Technical Problems and Objects of the Invention," as "provid[ing] a system for making a joint along adjacent joint edges of two building panels, especially floor panels ... said system being characterized in that ... the panels, when joined together, can occupy a relative position in said second direction where a play exists between the locking groove and a locking surface on the locking element that is facing the joint edges and is operative in said second mechanical connection." Alloc, 342 F.3d at 1369 (quoting '907 patent, col. 3,

II. 59-61; col. 4, II. 6, 15-19). The appellate court observed that the specification stated "notably, the 'objects of the invention are achieved by means of a panel-joining system having the features recited in the appended claims,' " '907 patent, col. 3, II. 56-58, and repeated the statement, at '907 patent, col. 6, II. 15-17. Alloc, 342 F.3d at 1369. Consequently, the appeals court concluded that "the specification teaches that the invention as a whole, not merely a preferred embodiment, provides for play in the positioning of floor panels." *Id*.

FN4. Because all the asserted patents in *Alloc* shared the same specification, the court cited the '907 specification indicating that all references to that specification were to be understood as also relating to the '410 and '267 patents. Alloc, 342 F.3d at 1368 n. 3.

The *Alloc* court also noted that the specification teaches that play between the components of the locking joint permits displacement; i.e., allows connected panels to slide relative to one another. *Id.* (citing '907 patent, Figure 1). Referring to the specification's description of Figure 1, the court indicated that displacement, facilitated by play, permits assembly by snap action. Alloc, 342 F.3d at 1369. Additionally, the court observed that, according to the '907 specification, play permits disassembly and reassembly of a floor previously laid without causing damage to the panels. *Id.* The court further stated that the '907 specification criticized prior art systems without play, teaching that displacement of the prior art panels was a "complicated operation" in systems that were tightly urged together and that disassembly and reassembly, which play facilitates, was unfeasible with those prior art systems. *Id.* at 1369-70. The court also observed that all the figures and embodiments in the asserted patents implied play, or as in the case of Figure 1b, expressly disclosed play. *Id.* at 1370. Relying on the foregoing, the court concluded that "the patents do not show or suggest any systems without play." *Id.* Thus, the court held that "the '907 family of patents describe only flooring systems and methods of joining these flooring systems with play between the locking groove and the locking element." *Id.*

In reaching its conclusion, the court also considered the need to interpret the claims in light of the specification and yet to avoid impermissibly importing limitations into the specification. *Id.* The court determined that the '907 patent specification was analogous to that presented in SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 1345 (Fed.Cir.2001), and "lead to the inescapable conclusion that the claimed invention must include play in every embodiment." Alloc, 342 F.3d at 1370. Additionally, the court distinguished Sunrace Roots Enterprise Co. v. SRAM Corp., 336 F.3d 1298, 1305 (Fed.Cir.2003), a dispute focusing on whether the patent claims included a cam as a part of a shift activator, where the court had found that nothing in the written description indicated that the invention was exclusively directed toward cams or suggested that systems employing cams were outside the scope of the invention. Alloc, 342 F.3d at 1370-71. In *Sunrace*, the court held that the specification as a whole did not mandate that the claimed invention include a particular feature; instead, the court found that the patentee had clearly contemplated a shift activator without a cam. Alloc, 342 F.3d at 1371.

The *Alloc* court also stated that although "the ['907 patent] specification alone is sufficiently clear, the prosecution history of the patent family confirms the description in the specification of each patent, namely, that play is a key feature of the claimed invention." Id. The court relied upon the PCT priority application and the International Preliminary Examination Report ("IPER") as indicating the presence of play in the system joint. Id. Also cited by the court were the applicant's representations in response to a prior art rejection during the prosecution of the '621 parent application before the United States Patent and Trademark Office ("USPTO"), indicating that play was important because it enabled displacement and

disassembly of the connected panels. Id. The court observed that those representations distinguishing the invention from the prior art based on the invention's ability to displace panels ("slide movably") and to release adjacent panels by rotation about the joint were also relied upon by the patent examiner and the USPTO in finding that play enabled those features. Id. Relying on the patentee's express disavowal of systems without play during the prosecution of the '621 patent, the court held that Alloc could not contend before it that the '621 patent claimed a flooring system and method for installing systems without play. Id. (citing Middleton, Inc. v. Minn. Mining & Mfg. Co., 311 F.3d 1384, 1388 (Fed.Cir.2002)).

The court further noted that, after gaining allowance of its claims, the applicant added new claims nearly identical to the allowed claims except without the term play, but that the applicant did not retract or modify the representations that secured allowance of the original claims. Alloc, 342 F.3d at 1372. Instead, the applicant acknowledged that, although the new claim did not define play, "displacement of the panels is still facilitated in a direction along the joints which is what is believed to be meant by the Examiner's Statement of Reasons for the indication of allowable subject matter." *Id.* Thus, the Court has described *Alloc's* claim construction analysis of the "play" requirement.

Before addressing whether the Plaintiffs have presented throughly justified grounds for deviating from *Alloc's* construction of the claims, the Court comments on Saunders Group, Inc. v. Comfortrac, Inc., 492 F.3d 1326, 1333 (Fed.Cir.2007), which the Plaintiffs rely upon as summarizing *Alloc*. *Saunders* states the *Alloc* holding as follows:

The claims at issue in *Alloc* recited floor system features related to "displacement" and "disassembly" of the flooring components. *Id.* at 1368. The court construed the claims to require "play" between the flooring components because the patent specifically taught that such play enabled the displacement and disassembly features and because the patent criticized prior art systems that lacked play as being impossible to disassemble nondestructively. *Id.* at 1369-70.

Having considered *Alloc*, and *Saunders's* synopsis of *Alloc*, the Court concludes that *Saunders* does not capture *Alloc's* entire claim construction analysis. Next, the Court addresses the Plaintiffs' arguments in contending that the Court should deviate from *Alloc*.

Reexamination and Reissuance Proceeding

In maintaining that *Alloc's* reasoning is no longer applicable, the Plaintiffs rely on the reexamination and reissuance proceeding. On September 10, 2003, when *Alloc* was issued, the USPTO was reconsidering the '621 patent,FN5 the parent of the '267, '907, and ' 410 patents, in combined reexamination/reissue proceedings.

FN5. On January 13, 1998, the '621 patent issued with 23 claims.

The proceedings began on June 30, 1999, when Valinge filed for a broadened reissue pursuant to 35 U.S.C. s. 251.FN6 In the accompanying declaration, Pervan stated that "I believe the original patent to be partly inoperative or invalid by reason of the patentee claiming less than the patentee had the right to claim in the patent. Specifically, [the] Applicant failed to include the subject matter of *claims 24-40* which are included in this reissue application." (J. Ex. 12 at 53.FN7) (Emphasis added).

FN6. The Plaintiffs have provided a chronology of events that they assert are key events in the prosecution of the RE '439 patent-the merged reissue and re-examination of the '621 patent. (Pls.' Open. Br., PX-3.) That chronology is both over-and under-inclusive and, therefore, has not been relied upon by the Court.

FN7. The Court has omitted the leading zeros in the Bates numbers.

In an Office Action dated April 10, 2000, the Examiner rejected the application "because the error which is relied upon to support the reissue application is not sufficient in that it does not provide a detailed description of the subject matter the Applicant failed to include in the claims and upon which a reissue can be based." (J. Ex. 12 at 68.)

On June 10, 2000, Pergo filed a request for reexamination. (J. Ex. 12 at 77.) On July 10, 2000, Pervan filed a supplemental declaration stating:

Specifically, [the] Applicant failed to include the subject matter of claims 24-40 which are included in this reissue application. In one specific example, [the] Applicant failed to include an independent claim, such as claim 31, wherein the locking groove and the locking element are defined as being dimensioned such that when adjacent panels are joined together and the locking element is received within the locking groove, there is sufficient space within the locking groove to allow mutual displacement of the adjacent panels in a direction of the first and second edges and to enable the locking element to leave the locking groove if the respective building panel is turned about its first edge angularly away from the locking strip.

(Jt. Ex. 12 at 81.) (Emphasis added).

On July 21, 2000, the Examiner issued an initial notice of allowability for all 40 claims of the '621 reissue patent stating:

[T]he prior art of record fails to teach the use of adjacent floor panels being interconnected by locking elements located within a groove formed on the underside of the panels; wherein displacement of the panels is allowed in a direction of the joint formed between the adjacent panels so as to allow the locking element to be released from the groove when the panel is rotated about the joint formed between adjacent panels.

(Jt. Ex. 12 at 86.)

However, on September 7, 2000, the USPTO ordered re-examination of the '621 patent. (*See* Jt. Ex. 12 at 89.) On November 17, 2000, the USPTO issued a decision merging the reissue and reexamination proceedings. (*See* Jt. Ex. 12 at 87-93.)

On February 28, 2001, Valinge filed "housekeeping amendments" to reflect the merged proceeding. (Jt. Ex. 12 at 98-104.) On October 8, 2003, Valinge provided the USPTO with a copy of the September 10, 2003, *Alloc* decision. (Jt. Ex. 12 at 166-67.) Valinge asserted that *Alloc* incorrectly interpreted Valinge's remarks accompanying claims 21, 22, and 23 as inferring that Valinge "somehow acknowledged that 'play exists' in all claims of the '621 patent." (Jt. Ex. 12 at 166.) Valinge contended, that as recognized by the *Alloc* dissent, Valinge did not intend to include the '621 patent claim 1 limitation of a joint where " 'play exists,' " in independent claims 21, 22, and 23. (Jt. Ex. 12 at 166.) Further, Valinge contended that claim 22 could not

reasonably be construed to require play because, except for the omitted limitation requiring a joint where "play exists," claim 22 would be identical to independent claim 1. (Jt. Ex. 12 at 166.) Thus, Valinge argued that, according to the literal language of the claims and common claim construction principles, independent claims 21, 22, and 23 did not include play. (Jt. Ex. 12 at 166.) In the remarks accompanying claims 21, 22, and 23, Valinge also stated that the reference to the "'play that exists' " was a reference to the limitation in claim 1; i.e., " 'where a play exists,' " that was expressly omitted from claims 21, 22, and 23. (Jt. Ex. 12 at 166.)

On October 9, 2003, the Examiner rejected a number of claims of the '621 reissue patent, including claims 21, 22, 23, and 31, as being unpatentable over claims 1 and 2 of the '579 patent. Such rejection was based upon the doctrine of obviousness-type double-patenting. The Examiner stated that the '621 reissue claims were not patentably distinct from the '579 patent claims because

each is directed to a system for joining adjacent panels including first and second mechanical connections wherein at least one of the connections include a locking strip and groove wherein the locking groove is formed on an underside of the panel and the panels *are joined such that a play exists between adjacent panels*.

(Jt. Ex. 12 at 186-87.) (Emphasis added).

To cure the double-patenting rejection, Valinge filed a terminal disclaimer, pursuant to 37 C.F.R. s. 1.321(c), on January 8, 2004. (Jt. Ex. 12 at 191-211.) Valinge stated:

The Examiner may recall that at the time of the submission of claims 21-23, claim 1 (and the dependent claims based on claim 1) had been allowed over the references of record, one of which was Trotter (U.S. 4,819,932). Based on the Examiner's statement of reasons for allowance of claim 1, the [A]pplicant understood the allowance of claim 1 was not based on the presence of the "play" limitation in claim 1. Since the "play" limitation of claim 1 did not appear to be a basis for the Examiner's allowance of that claim, the Applicant submitted claims 21-23 without any play limitation, believing that such claims would also be patentable over Trotter.

Thus, the limitation calling for play which appears in claim 1 was deliberately omitted from claims 21-23. It is the Applicant's intention to eliminate any ambiguity or question from claims 21-23 with respect to the absence of a play limitation. Therefore, the Applicant understands that the patentability of claims 21-23 is being confirmed in this re is suance/re examination proceeding on the basis that those claims do not require play. If the Examiner's understanding of the scope of claims 21-23 as confirmed in application is different from the [A]pplicant's intended scope, i.e., as not including a limitation calling for play, [the] Applicant requests that the Examiner so indicate in her reasons for allowance or otherwise.

(Jt. Ex. 12 at 208.) The request was reiterated in Valinge's revised submissions filed on July 2, 2004, and October 4, 2004. (Jt. Ex. 12 at 226-27, 249-50.)

On April 11, 2005, the Examiner issued a non-final Office Action rejecting claims 21 and 22 (the determination also applied to claim 23, a dependent claim of claim 22) as being unpatentable based on Trotter. (Jt. Ex. 12 at 258-60.) The Examiner stated that Trotter disclosed "use of a joint between building panels ... such that a play exists ... to enable mutual displacement of the panels." (Jt. Ex. 12 at 260.) Trotter therefore "discloses that basic claimed joint arrangement except for the strip being integral with the second

edge of the panel," which the Examiner found to be obvious to one having ordinary skill in the art at the time of the invention. (Jt. Ex. 12 at 259-60.)

According to an interview record that Valinge filed with the USPTO on November 15, 2005, representatives of Valinge met with the Examiner and other USPTO personnel on April 20, 2005. (Jt. Ex. 12 at 293.) One topic of discussion was the potential rejection of the '621 reissue claims for obviousness in light of the Trotter prior art. (Jt. Ex. 12 at 293.) Valinge representatives informed the USPTO personnel that the original '621 patent had already overcome a rejection based on Trotter. (Jt. Ex. 12 at 293.) Valinge's attorney explained that Trotter did not teach a "strip extending substantially an entire length of the joint edge *or the mutual displacement features of the claims*." (Jt. Ex. 12 at 293.) (Emphasis added). The interview record states that "on April 21, 2005, an Office Action" FN8 was issued on the application and that, during a subsequent telephone conversation with Valinge's attorney, the Examiner indicated that the April 21, 2005, Office Action would be superceded by a new Office Action. (Jt. Ex. 12 at 294.)

FN8. The record does not contain an April 21, 2005, Office Action.

Thereafter, on June 2, 2005, the Examiner rejected claims 21 through 23 for double-patenting over claims 39, 41, 49, and 50 of the '410 patent. (Jt. Ex. 12 at 266-67.) The Examiner stated that the '410 patent and the '621 reissue application covered "common subject matter." (Jt. Ex. 12 at 268.) Her description of that subject matter included a statement that "a play exists between the locking groove and a locking surface on the locking element." (Jt. Ex. 12 at 268-69.)

On June 22, 2005, Valinge filed another Terminal Disclaimer FN9 to cure the double-patenting objection. (Jt. Ex. 12 at 272-75.) The Examiner issued a notice of allowability of the '621 reissue patent claims, without any statement of reasons. (Jt. Ex. 12 at 286.)

FN9. Valinge's response states that the Examiner's rejection was dated June 15, 2005.

Having carefully considered the record of the reissue/reexamination proceeding, the Court concludes that the record does not establish throughly justified grounds to depart from the *Alloc* holding. The premise for initiating the reissue proceeding related only to non-asserted claims 24 through 40. Pervan's July 10, 2000, statement describing omitted claim 31, refers to "sufficient space within the locking groove to allow mutual displacement of the adjacent panels in a direction of the first and second edges and to enable the locking element to leave the locking groove if the respective building panel is turned about its first edge angularly away from the locking strip," which, at the least, implies play.

No statements by Valinge indicating that non-play systems were covered by the '621 patent are included in the reissue/reexamination history until a month after *Alloc's* issuance. Although the reissuance proceedings had been underway for more than four years, the first time Valinge stated that claims not expressly reciting play should be understood as not requiring play was in the immediate wake of *Alloc*. Valinge's statement in the reissue/reexamination proceeding merely repeated Valinge's earlier self-serving disclaimer to the Federal Circuit of its intent to disavow non-play systems.

In 2004, Valinge stated that it understood the patentability of claims 21 through 23 was being confirmed in the reissuance/reexamination proceeding on the basis that those claims did not require play. Valinge

reiterated the statement in two subsequent filings with the USPTO and put the burden on the Examiner to refute its understanding. The Examiner did not respond. Also, the final allowance of the patent did not include any statement of reasons.

Inferring agreement with Valinge's statement from the Examiner's silence would be improper. *See*, *e.g.*, Prima Tek II, L.L.C. v. Polypap, S.A.R.L, 318 F.3d 1143, 1151 (Fed.Cir.2003); DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1326 (Fed.Cir.2001). The record of reissue/ reexamination proceedings does not outweigh *Alloc's* analysis of the specification or Valinge's original disavowal of non-play systems.

In asserting that play should not be read into claims in which it is not recited, the Plaintiffs rely upon Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 902 (Fed.Cir.2004). *Liebel-Flarsheim* involved a patent pertaining to fluid powered injectors used to inject fluid into patients during medical procedures. Resolution of an issue on appeal depended on whether the common specification of the two patents limited the scope of the asserted claims to injectors that included pressure jackets. *Id.* at 903. The court held that asserted claims did not expressly require pressure jackets, and that the common specification did not state that a pressure jacket was a required component of the inventions. *Id.* The court also distinguished the matter from prior cases in which a narrow construction was appropriate, including SciMed Life Systems, Inc., 242 F.3d at 1345, and declined to limit the scope of the claims. *See* Liebel-Flarsheim, 358 F.3d at 906.

Specifically, the court stated that "[u]nlike in *SciMed*, the specification in this case contains no disclaimer; all that Medrad can point to in the common specification of the ... patents is the absence of any embodiment that lacks a pressure jacket." *See* Liebel-Flarsheim, 358 F.3d at 906. The court noted that, in addition to the absence of a disclaimer in the specification, there were no other indicia of the reasons that had been invoked for giving claims a narrow reading. Id. at 908. Specifically, the court found that the prosecution history was significant because the "omission of reference to a pressure jacket in many of the claims of the applications that matured into the ... patents was a strong indication that the applicants intended those claims to reach injectors that did not use pressure jackets." Id. at 909. Moreover, the court noted that "in a paper filed during the prosecution of the '261 patent, the applicants clearly stated that '[i]n the claims as amended herein, the locking structure is not necessarily at the front end of the syringe, nor is there necessarily a pressure jacket.'

"Id.

Unlike *Liebel-Flarsheim*, the Federal Circuit has held that the '621 patent specification is analogous to that presented in *SciMed*. Alloc, 342 F.3d at 1370. Thus, the *Alloc* court considered *SciMed*, a key decision distinguished by *Liebel-Flarsheim*, and concluded that the Pervan specification is similar the *SciMed* specification.

While the prosecution history accreted during the reissuance/reexamination process was not before the *Alloc* court that history is, at best, ambiguous. Morever, Valinge's statements disavowing play in reissuance/reexamination process were not made until after the Federal Circuit issued *Alloc*. The timing of Valinge's statements raises doubts about its motivation for making those statements, and reduces the weight accorded to them. Thus, this Court concludes that the additional prosecution history does not establish that the patents-in suits are now analogous to those of *Liebel-Flarsheim*.

Issuance of the '579 Patent in February of 2003

The Plaintiffs state that *Alloc* is not a basis for reading play into the claims of the '579 patent.FN10 They state that the Federal Circuit only addressed three patents-the '267, '907, and '410 patents-and that all three

patents contain limitations calling for displacement of the panels in the direction of their joined edges and/or limitations calling for the disassembly of the panels. (Pls.' Open. Br. 39.) The Plaintiffs maintain that the Federal Circuit relied extensively on the "critical features" of "displacement" and "disassembly" in holding that the claims at issue in *Alloc* were to be construed as including a "play" limitation, although not expressly reciting play. (Pls.' Open. Br. 40-42.) The Plaintiffs argue that neither of the critical features recited in *Alloc* can be found in any of the claims of '579 patent and, therefore, it would be plain error to apply *Alloc* as a basis for reading play into any of the asserted claims of the '579 patent. (Pls.' Open. Br. 42.)

FN10. According to Pergo, the asserted claims in the '579 patent are claims 1 through 23 and 25 through 28. (Pergo's Open. Br. 1 n. 2 .)

The *Alloc* holding that play is a required limitation is not restricted to the presence of the displacement and disassembly of the panels. Rather, the court identified a non-exhaustive list of claim terms "in which play is necessarily present." FN11 Alloc, 342 F.3d at 1368. In explaining its conclusion that play was required in all claims without any recitation of the term itself, the court emphasized specific claim terms to demonstrate that the terms related to "an essential feature of the invention: play." Id. at 1365 n. 2. Among the terms emphasized in the representative claims were "locking element," "first locking member" "second locking member," "locking means," "locking means being constructed so as to operate as a one-way snap lock," "locking means also being constructed so as to enable ... [adjacent panels] to be turned in relation to each other [to] unlock said one-way snap lock." Id. at 1366-67.

FN11. The court analyzed claim 19 of the '267 patent, claim 1 of the '907 patent, and claim 1 of the '410 patent which it determined were representative of the asserted claims from each patent. 342 F.3d at 1365.

The term "locking element," appears throughout the asserted claims of '579 patent. For example, Claim 10 recites:

A mechanical locking system for locking a first edge of a first panel to a second edge of an identical second panel, the mechanical locking system comprising: a tongue and groove on the first edge and the second edge forming a first mechanical connection locking the first and second edges to each other in a first direction at right angles to a principal plane of the panels; a locking device arranged on an underside of the first and the second edges, the locking device forming a second mechanical connection locking the first and the second edges to each other in a second direction parallel to the principal plane and at right angles to the edges; the locking device including a locking groove which extends parallel to and spaced from the second edge, the locking groove being open at the underside of the second edge and including an internal surface; the locking device further including a strip extending from the first edge, the strip extending throughout substantially an entire length of the first edge and being provided with a locking element projecting from the strip; the strip, the locking element, and the locking groove being configured such that when the second edge is pressed against an upper part of the first edge and is then angled down, the locking element can enter the locking groove; the locking element has a locking surface which faces the first edge and is configured so as to contact the internal surface of the locking groove when the first and second edges are joined together to prevent substantial separation of the joined first and second edges; and the locking element further including an outer portion which is most distant to the joined edges and is not in contact with the locking groove when-[sic] the first and second edges are joined together.

('579 patent, 11:35-67; 12:1-2.) (Emphasis added). Claim 10 discusses a "second mechanical connection" that locks two edges together using a locking element and a locking groove. The description of the claimed invention in the specification makes it clear that play is "operative" in the second mechanical connection. ('579 patent, 4:17-24.) FN12

FN12. The construction of the '579 patent claims as including play is also consistent with the Examiner's October 3, 2003, Office Action rejecting claims 1, 2, 14, 21 through 23, 31, and 36 of the '621 reissue patent as being unpatentable over claims 1 and 2 of the '579 patent because the '621 reissue claims were not patentably distinct from the '579 patent claims because "each is directed to a system for joining adjacent panels including first and second mechanical connections wherein at least one of the connections include a locking strip and groove wherein the locking groove is formed on an underside of the panel and the panels are joined *such that a play exists* between adjacent panels." (Jt. Ex. 12 at 186-87.) (Emphasis added).

Although not considered by the Federal Circuit, the '579 patent has the same specification as the three patents that were construed in *Alloc*, and the same parent patent. The Plaintiffs have not established that the issuance of the '579 patent throughly justifies departure from *Alloc's* holding.

March 2004, Comments by Examiner During the Prosecution of Unilin's '292 Patent

In contending that *Alloc's* reasoning is no longer applicable, the Plaintiffs rely on the March 2004, comments of the Examiner during the prosecution of Unilin's '292 patent.FN13 They state that those comments make it clear that the patents-in-suit are not limited to systems with play. (Pls.' Open. Br. 18 (citing PX-8 21, 23).)

FN13. The same person, Yvonne M. Horton ("Horton"), was the examiner for the '292 patent and the five patents-in-suit on the Pervan patent specification.

Specifically, in a March 17, 2004, Office Action, the Examiner rejected claim 6 of the Unilin '292 patent as being anticipated by the '410 patent to Pervan. The Examiner determined that the '410 patent taught panels "locked in all directions" and that "it is inherent that members locked in all directions are locked 'without play.' " (Pls.' Open. Br. PX-8 21.)

In response, Unilin's counsel suggested:

It is respectfully submitted that the Examiner has misinterpreted the teachings of Pervan '410 inasmuch as Pervan in all embodiments requires "play [,]" that is, a gap between the locking elements that permits longitudinal sliding of one panel relative to the other. In the presence of such play, there can be no bending of one of the coupling elements out of its normal relaxed unbent position when the panels are coupled together to effect an urging of the coupled panels together as required by the last paragraph of claim 1 of this application.

(Pls.' Open. Br. PX-8 13.) Stated somewhat differently, Unilin asserted that with the play present between the coupled panels, the recited coupling part could not be bent out of its normal, unbent position as required by Unilin's rejected claim.

Thereafter, the Examiner allowed all of Unilin's rejected claims. (Pls.' Open. Br. PX-8 1.) In her reasons for

allowance, the Examiner stated "the prior art of record [the '410 patent] fails to teach the use of a floor covering including a coupling part having an elastically bendable portion that when coupled remains slightly bent out of its normal relaxed unbent position." (Pls.' Open. Br. PX-8 4.)

Thus, the Court concludes that the record of the '292 Unilin patent indicates that the Examiner adopted Unilin's position and implies that she retreated from her original position that the '410 patent included panels without play. Moreover, the Examiner's "without play" comment is ambiguous and unreliable extrinsic evidence. *See* Phillips, 415 F.3d at 1318. It does not provide a throughly justified ground for deviating from *Alloc's* holding that play is included in the Pervan patent specifications. The Pervan patent specifications are intrinsic evidence that controls when in conflict with the extrinsic evidence. *Id.* The Plaintiffs have not established that the March 2004, comments by the Examiner in the prosecution of Unilin's '292 Patent throughly justifies departure from the *Alloc* precedent.

Claim Differentiation

The Plaintiffs rely upon the doctrine of claim differentiation contending that claim 2 of the '579 patent (which depends on claim 1) specifically adds a play limitation to claim 1. They make the same argument with respect to claim 11, which depends on claim 10. The Plaintiffs also assert that the doctrine of claim differentiation applied to the RE '439 patent requires that play not be read into claim 22 because it is already part of claim 1, and play is the only difference between the two claims.

The doctrine of claim differentiation cannot broaden claims beyond the scope that is supported by the specification. ATD Corp. v. Lydall, Inc., 159 F.3d 534, 541 (Fed.Cir.1998). Moreover, the doctrine "only creates a presumption that each claim in a patent has a different scope; it is not a hard and fast rule of construction." Seachange Int'l, Inc. v. C-COR, Inc., 413 F.3d 1361, 1369 (Fed.Cir.2005). Here, as the Federal Circuit has held, the Pervan specification instructs that play is a required limitation in each embodiment of the invention. This construction is further confirmed by the prosecution history of the parent '621 patent which discloses that Pervan expressly disavowed embodiments without play. Alloc, 342 F.3d at 1372. Additionally, the Plaintiffs' argument for claim differentiation as to claims 2 and 11 of the '579 patent is not consistent with the language of those claims because they recite "small play." The term "small play" is not the same as the "play" that exists in claims 1 and 10. Therefore, the Court concludes that the doctrine of claim differentiation cannot be used to broaden the claims 2 and 11 of the '579 patent or claim 22 of the RE '439 patent.

The Plaintiffs have not established throughly justified reasons to depart from the appeals court's rulings in *Alloc*. Given the common specification of the five patents-in-suit and having considered the matters that were not before the *Alloc* court, this Court concludes that the claims of the five patents-in-suit require play.

Recapture

In arguing that the prosecution history confirms that the claims require play, Pergo also argues that Pervan cannot recapture subject matter that he "expressly disavowed." (Pergo's Open Br. 40-43.) The Plaintiffs counter that Pergo has erroneously invoked the recapture rule. (Pls.' Resp. Br. 12-23.) The parties have devoted significant portions of their briefs to this issue. However, at this juncture and in light of its determination that the claims of the five patents-in-suit require play, the Court acknowledges the parties' arguments but need not address the issue. The Court will now consider the parties' proposed constructions and construe the specific disputed claim terms.

1. Locking Element

The first term to be interpreted is "locking element." The term appears in claims 1, 2, 3, 5, 10 through 12, 14, 19, 20, 23, 24, 27, 28, 31, 32, 35, 36, 39, and 40 of the '267 patent; in claims 2, 4, 6, 8, and 9 of the '907 patent; in claims 1, 12 through 14, 25 through 27, 38 through 41, 44, 49, and 50 of the '410 patent; in claims 1, 10, 21, 22, and 28 of the '579 patent; and, in claims 1, and 21 through 23 of the RE '439 patent. The Plaintiffs' proposed construction is "a projection at the edge of the panel as recited in the claim that engages a locking groove on another panel." (Pls.' Open. Br. 25.) Pergo's proposed construction is "a portion of the strip spaced apart from the joint edge, projecting up at right angles and configured to be received into a locking groove such that a play exists between the locking element and the locking groove." (Unilin's Open. Br. 23-25.) FN14

FN14. For non-play terms, Pergo adopted the proposed constructions of the Unilin Defendants. (Pergo's Open. Br. 25.) The Plaintiffs object to Pergo's reliance upon arguments presented by Unilin in its opening brief because Unilin was dismissed with prejudice from the action after filing its brief. (*See* Pls.' Response Br. 23.) The Plaintiffs state that such dismissal leaves Pergo with having advocated constructions for only 11 limitations listed on page 26 of its opening brief. (Id.)

The Plaintiffs' position is unaccompanied by citations to supporting case law. Moreover, the Court declines to penalize Pergo for the ability of the Plaintiffs and Unilin to settle their dispute. Therefore, the Court has considered the arguments made in Unilin's brief on behalf of Pergo. This Decision and Order cites Unilin's brief, but refers to the constructions as being those of Pergo.

The term "locking element" appears in Claim 1 of the RE '439 patent, which is representative of the claims with that term, as follows:

A system for providing a joint between adjacent building panels, comprising: each of said building panels including a first edge and a second edge such that the first edge of each of said building panels forms a first mechanical connection with the second end of an adjacent one of the building panels locking the first and second edges of the building panels to each other in a first direction at right angles to a principal plane of the panels, and a locking device arranged on a rear side of the building panels forming a second mechanical connection locking the building panels to each other in a second direction parallel to the principal plane and at right angles to the first and second edges, said locking device fitting within a locking groove extending parallel to and spaced apart from the first edge of said building panels, and which locking groove is open at the rear side of the building panels, the locking device comprising a strip integrated with the second edge of each of said building panels, said strip extending throughout substantially an entire length of the second edge and being provided with a locking element projecting from the strip, such that when two adjacent building panels are joined together, the strip projects from the rear side of the second edge of the panels with its *locking element* received in the locking groove of an adjacent building panel, the building panels, when joined together, can occupy a relative position in said second direction where a play exists between the locking groove and a locking surface on the locking element that is facing the first and second edges and is operative in said second mechanical connection, the first and the second mechanical connections both allow mutual displacement of the building panels in a direction of the first and second edges, and the second mechanical connection enables the *locking element* to leave the locking groove if the respective building panel is turned about its first edge angularly away from the strip.

('439 patent, 10:35-67;11:1-7.) (Emphasis added).

Pergo's proposed construction includes a requirement that the projection be "up at right angles." (Unilin's Open. Br. 23-24.) That proposed requirement is drawn from the snippets of the specification, and its discussion of the figures and the preferred embodiments. The requirement is not central to the claimed invention and is, therefore, rejected. Furthermore, as demonstrated by the representative claim, the projection is well-described in the claim itself.

The Plaintiffs' proposed construction allows for the projection to be defined in the claim, but it is missing "play." Therefore, the Court construes the term "locking element" as "a projection at the edge of the panel as recited in the claim that engages a locking groove on another panel such that a play exists between the locking element and the locking groove."

2. Locking Member

The second term to be interpreted is "locking member" in claims 1, 2, 4, 5, 6, 12, and 13 of the '907 patent, and in claim 39 of the '267 patent. The Plaintiffs maintain that the term should be construed as "a locking element or a locking groove of one panel that allows for engagement and locking another panel." (Pls.' Open. Br. 25.) They assert that because the word "means" is not used in the term, there is a presumption that the term is not a "means-plus-function," and with respect to the '907 patent, which is a method patent, the Defendants can cite no cases in which the strictures of 35 U.S.C. s. 112 para. 6 were applied to a method claim.

Pergo does not propose a general definition of "locking member." However, Pergo maintains that "first locking member" and "second locking member" in claims 1, 5, and 13 of the '907 patent, and in claim 39 of the '267 patent should be construed under 35 U.S.C. s. 112 para. 6 FN15 to be the equivalent of "locking element" and "locking groove," respectively. (Unilin's Open. Br. 39). Pergo cites MIT v. Abacus Software, 462 F.3d 1344, 1353 (Fed.Cir.2006). Pergo also maintains that because the "locking member" terms are associated with structures that permit displacement and disassembly, the term "locking member" requires the presence of play, regardless of whether it is construed under 35 U.S.C. s. 112 para. 6. (Unilin's Open. Br. 39 (citing Alloc, 342 F.3d at 1372).)

FN15. Paragraph 6 of Section 112 of Title 35 of the United States Code states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. s. 112, para. 6.

Additionally, as to claims 1, 5, and 13 of the '907 patent and claim 13 of the '267 patent, Pergo contends that the terms "first locking member" and "second locking member" should be construed as "means-plusfunction" terms. In opposition, the Plaintiffs contend that this Court should conclude that the two terms are analogous to "compression element" as construed in DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1023 (Fed.Cir.2006).

In considering the general definition of the terms "locking member," "first locking member," and "second locking member" in claims 2, 4, 6, and 12 of the '907 patent, the interpretation of locking member as "a locking element or a locking groove of one panel that allows for engagement and locking another panel," is

consistent with the language of those claims. The term "locking member" is used as a generic term and then either locking element or locking groove is specified. However, in dependent claims 2 and 3 of the '907 patent, the term "locking member" is specifically defined as being the "locking element" or "locking groove."

"Member" is defined as "a distinct part of a whole." Webster's II New Riverside University Dictionary, 740 (1984). Another definition of "member" is an element that belongs to a set. McGraw-Hill Dictionary of Scientific and Technical Terms, 1236 (5th ed.1994). "Element" is defined as component. Id. at 668. "Member" is also defined as "any of the individual entities belonging to a set." Oxford English Dictionary, http://dictionary.oed.com/(last visited July 1, 2009). Furthermore, "locking" means "fastening." Webster's II New Riverside University Dictionary, 701. Having considered the specification and the ordinary definitions of the terms "locking" and "member," as well as the inclusion of play, this Court defines "locking member" as a "component of the fastening set that allows play." The Court also notes that the ordinary definitions of "first" and "second," respectively, are corresponding in order to the number one, id. at 481, and coming next after the first in order. Id. at 1054. And, the Court adopts those general definitions of the terms as modifying the term "locking element."

With respect to the means-plus-function contention Pergo raises, the Court notes that Claim 1 of the '907 patent claims:

A method of laying and mechanically joining floor panels in parallel rows, wherein relative positions of the panels during the method can be defined as including first and second mutual positions, a first mutual position in which (i) the two panels are held in an angled position relative to each other and (ii) upper portions of adjacent edges of the two panels are in mutual contact, and a second mutual position in which the two panels are (i) located in a common plane, (ii) mechanically locked to each other in a first direction that is at right angles to the common plane, (iii) mechanically locked to each other in a second direction, that is at right angles to said first direction and to the adjacent joint edges, as a result of a first *locking member* disposed at one of the adjacent edges being connected to a second *locking member* disposed at the other one of the adjacent edges, and (iv) being displaceable in relation to each other in the direction of the adjacent joint edges, wherein said method comprises *the steps of:*

- (a) bringing a new one of the panels into an intermediary position where (i) a previously laid first one of the panels is located in a first row, (ii) a second one of the panels is located in a second row and is in said first mutual position in relation to the first panel, and (iii) the new panel is located in the second row and is in said second mutual position in relation to the second panel and is in a position relative to the first panel such that a mutual distance is present between the upper portions of the adjacent joint edges of the new panel and the first panel;
- (b) while maintaining said second mutual position between the new panel and the second panel, displacing the new panel relative to the second panel into said first mutual position in relation to the first panel; and
- (c) angling the new panel and the second panel together into said second mutual position in relation to the first panel.

('907 patent, 10:35-67; 11:1-3.) (Emphasis added).

The issue of whether claim 1 of the '907 patent and claim 39 of the '267 patent are means-plus-function

claim elements was discussed in Alloc, 342 F.3d at 1372-73. Citing O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1583 (Fed.Cir.1997), the court noted that, although typically considered in light of apparatus claims, s. 112 para. 6 is also applicable to the steps in a process claim. 342 F.3d at 1373.FN16 The court declined to resolve the issue because the outcome of the appeal did not depend on whether or not the claims were interpreted under 35 U.S.C. s. 112 para. 6, because of the court's holding that the critical factor of play applied to claims of "either flavor." Id. at 1373.

FN16. *Alloc* suggests that because the '907 and '267 patents are method patents, analysis would be more properly conducted under a "step-plus-function" framework of *O.I. Corp.*, and its progeny. *See* Donald S. Chisum, 5A *Chisum on Patents*, s. 18.03[5][e] n. 1657 (2007). The concepts of "step-plus-function" and "means-plus-function" are closely related. Seal-Flex Inc. v. Athletic Track and Court Const., 172 F.3d 836, 848 (Fed.Cir.1999) (Radar, J., concurring) (noting that although they require distinct analyses, the concepts are similar and that 35 U.S.C. s. 112 para. 6 suggests a strong correlation between the two). *See also*, O. I. Corp., 115 F.3d at 1583. Judge Radar's extensive *Seal-Flex* concurrence suggests using means-plus-function case law to "give guidance for determining whether a claim element is in step-plus-function form so as to invoke the statute's claim interpretation requirements." Seal-Flex, 172 F.3d at 848 (Radar, J., concurring).

Notwithstanding the *Alloc* court's position, the parties did not undertake a step-plus-function analysis. Moreover, at the April 3, 2009, *Markman* hearing, the parties were unified in their position that step-plus-function analysis has no relevance to the method patents at issue. Given the *Alloc* court's statements, the parties' position is somewhat puzzling. However, based on their position, the Court has not engaged in a "step-plus-function" analysis of the '907 or the '267 patent claims. Nonetheless, the Court notes that, with the exception of claim 13 of the '907 patent, the subject claims use the phrase "comprises of the steps of." *See* Masco Corp. v. United States, 303 F.3d 1316, 1326-28 (Fed.Cir.2002).

However, in this instance, the parties also request construction of the terms "locking member," "first locking member," and "second locking member." Therefore, the Court will address the issue.FN17

FN17. In Norman D. Lifton, 2007 WL 2089303 at *16-*17, the district court determined that the terms "first locking member" and "second locking member" in the '907 patent are not means-plus-function claim elements and construed them as independent structural terms.

A means-plus-function limitation requires a court "first to identify the claimed function and then to determine the structure in the specification that corresponds to that function." Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc., 389 F.3d 1370, 1376-77 (Fed.Cir.2004); *accord* Gemstar-TV Guide Int'l, Inc. v. ITC, 383 F.3d 1352, 1362 (Fed.Cir.2004) ("We consult the claim language to determine the function of the limitation.... We then consult the written description to determine the corresponding structure necessary to accomplish the stated function."). The use of the word "means" creates a presumption that s. 112, para. 6 applies, while the absence of the word "means" creates a presumption that it does not apply. Personalized Media Commc'ns, LLC v. ITC, 161 F.3d 696, 703-04 (Fed.Cir.1998); *accord* Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed.Cir.2004).

DePuy Spine, Inc., 469 F.3d at 1023, notes that "the presumption flowing from the absence of the term 'means' is a strong one that is not readily overcome." (quoting Lighting World, 382 F.3d at 1358). "The use of the term 'means' is 'central to the analysis,' ... and has come to be closely associated with means-plus-function claiming." Lighting World, 382 F.3d at 1358 (citations omitted). The presumptions can be overcome "if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrant."

Personalized Media, 161 F.3d at 704.

In the Pervan specification, the phrases "first locking member" and "second locking member," are presumptively not subject to 112 para. 6 because they do not contain the term "means." *See* MIT, 462 F.3d at 1353; CCS Fitness, Inc. v. Brunswick Corp. ., 288 F.3d 1359, 1369 (Fed.Cir.2002). The word "means" also does not appear in claims 1 through 3 of the '907 patent or in claim 39 of the '267 patent. Thus, there is a presumption that s. 112 para. 6 does not apply. However, a limitation lacking the term "means" may overcome the presumption against means-plus-function treatment if it is shown that "the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.' " Id. (quoting Watts v. XL Sys., Inc., 232 F.3d 877, 880 (Fed.Cir.2000)).

Pergo argues that the function of the first and second locking members is to mechanically lock two panels in the second "horizontal direction," but there is no structure to carry out this function. (Unilin's Open. Br. 39.) It asserts that because the only structures described in the Pervan patents to lock the panels in the horizontal direction are the "locking element" and "locking groove," a person of ordinary skill in the art would understand the "first locking member" and "second locking member" to correspond with the structures of the locking groove and locking member disclosed in the specification. (*Id.*)

Although Pergo cites MIT, 462 F.3d at 1353, it neither analyzes nor explains how the decision supports its contention. The "generic terms 'mechanism,' 'means,' 'element' and 'device,' typically do not connote sufficiently definite structure." Id. at 1354.

In *MIT*, the appellate court upheld the district court's conclusion that the presumption had been overcome and that the phrase "colorant selection mechanism" in a patent for a color processing system for producing color originals should be construed as a means-plus-function limitation. *Id*. The court noted that the patentee had used "mechanism" and "means" as synonyms, at least one dictionary equated "means" with "mechanism," and that the term "colorant selection" which modified "mechanism" was not defined in the specification and had no dictionary definition and there was no suggestion that it has a generally understood meaning in the art. *Id*. Therefore, the appeals court determined that "colorant selection mechanism" did not connote sufficient structure to a person of ordinary skill in the art to avoid 112 para. 6. *Id*.

In this case, Pergo has not demonstrated that the specification uses "member" as a synonym of "means." Furthermore, no functional language follows the claim term "locking member." Pergo has not overcome the presumption that "locking member" is not a means-plus-function claim term and, therefore, the Court will construe the terms as independent structural terms.

Claim terms are normally used consistently throughout a patent. Phillips, 415 F.3d at 1315. Therefore, the Court will define "locking member," "first locking member," and "second locking member" respectively as "a component of the fastening set that allows play," and as "the component, corresponding in order to the number one, of the fastening set that allows play," and "the components, coming next after the first in order, of the fastening set that allows play."

3. Locking Means

The next terms for interpretation are "locking means" which appears in claims 1, 13, 14, 26, and 27 of the '410 patent, and "first locking means" and "second locking means" which appear in claims 1, 10, 27, and 31 of the '267 patent. The '410 patent is a systems patent. The '267 patent is a method patent.

'267 Patent-Method Patent

The Plaintiffs agree that "first locking means" in the '267 patent "for mechanically locking together their long edges and short edges in a first direction at right angles to a principal plane of the panels" in claims 1, 10, 27 and 31 of the '267 patent is governed by s. 112 para. 6. (Pls.' Open. Br. 26; Pls.' Reply 10.) They state that there is a presumption that s. 112 para. 6 is applicable because "means" is used and there is not sufficient structure recited to overcome the presumption. Therefore, they state that in construing the term "first locking means," the Court must determine what structure corresponds to the recited function. The Plaintiffs assert that the recited function for "first locking means" is to prevent the panels from being displaced in relation to each other in the D1 or vertical direction (when the panels are on the floor), and the structure corresponding to the recited function is a tongue and groove. (Pls.' Open Br. 29).

However, as to the term "second locking means," the Plaintiffs maintain that there is "overwhelming" structure recited to overcome the presumption that s. 112 para. 6 applies. The Plaintiffs note that large sections of the claim are devoted to reciting structures that perform the function such as the locking strip, locking groove, and locking element. (Pls.' Open. Br. 27.) As an example, the Plaintiffs rely on claim 1 of the '267 patent contending that the structures are:

second locking means including:

a locking strip at a first long edge and at a first short edge at a bottom side of each of the panels, and

a locking groove at a second long edge of each of the panels, opposite the first long edge, and a locking groove at a second short edge of each of the panels, opposite the first short edge, each of the locking grooves extending parallel to and spaced from the corresponding second edge and being open at the bottom side of the panel, and each locking strip being integrated with the panel and extending throughout substantially an entire length of the corresponding first edge,

a locking element projecting from each of the locking strips.

(Pls.' Open. Br. 27.)

Pergo takes the position that in claims 1, 10, 27, and 31 of the '267 patent "first locking means" and "second locking means" should be construed under 35 U.S.C. s. 112 para. 6 as having the same or equivalent structure as a recess on one panel edge and locking tongue on another panel edge forming a mechanical connection in the vertical direction, and including a "locking element" of one panel and a "locking groove" of another panel forming a "second mechanical connection" in the horizontal direction and a "one-way snap lock." (See Joint Comparison of Proposed Claim Constructions 3.)

Pergo also states for claims that refer to "first" and "second" locking means (Pergo's Open. Br. 26 n. 12 (citing '579 Patent, claims 1, 10, 27, and 31)), only the "second" locking means implicates play. (Pergo's Open. Br. 26 n. 12.) And, states Pergo, the "first" locking means refers to locking the panels to prevent relative movement of the panels in a vertical direction; i.e., perpendicular to the floor, as to which play is not relevant. (Id.)

Claim 1 of the '267 patent states:

A method for laying and mechanically joining rectangular building panels in parallel rows, the method comprising the steps of:

- (a) providing a plurality of rectangular building panels having long edges and short edges, said panels being provided with first locking means for mechanically locking together their long edges and their short edges in a first direction at right angles to a principal plane of the panels, the panels further including second locking means including: a locking strip at a first long edge and at a first short edge at a bottom side of each of the panels, and a locking groove at a second long edge of each of the panels, opposite the first long edge, and a locking groove at a second short edge of each of the panels, opposite the first short edge, each of the locking grooves extending parallel to and spaced from the corresponding second edge and being open at the bottom side of the panel, and each locking strip being integrated with the panel and extending throughout substantially an entire length of the corresponding first edge, a locking element projecting from each of the locking strips, such that when two adjacent panels have been mechanically joined together along adjacent edges thereof, one of the locking strips of one of the panels extends under the bottom side of an adjacent one of the panels with the locking element of said strip being received in the locking groove of the adjacent one of the panels, thereby mechanically connecting the one panel and the adjacent one panel to each other in a second direction parallel to said principal plane and at right angles to the joined edges;
- (b) placing a new one of the panels adjacent to a long edge of a previously laid first one of the panels in a first row and to a short edge of a previously laid second one of the panels in an adjacent second row, such that the new one of the panels is in the second row, while holding the new one of the panels at an angle relative to a principal plane of the first panel, such that the new one of the panels is spaced from its final longitudinal position relative to said second panel and such that the long edge of the new panel provided with a locking groove is placed upon and in contact with a locking strip at the adjacent long edge of the first panel;
- (c) subsequently angling down the new one of the panels so as to accommodate the locking element of the strip of the first panel in the locking groove of the new panel, whereby the new panel and the first panel are mechanically connected with each other in the second direction with respect to the thus connected long edges, wherein the long edges, in the angled down position of the new panel, are in engagement with each other and thereby mechanically locked together in the first direction also; and
- (d) displacing the new one of the panels in its longitudinal direction relative to the first panel towards a final longitudinal position wherein the locking element of one of the short edges of the new one of the panels and the second panel snaps up into the locking groove of the other one of the short edges, whereby the new one of the panels and the second panel are mechanically connected with each other in both in the first direction and in the second direction with respect to the thus-connected short edges.

('267 patent, 10:35-67; 11:1-33.)

Where an element in a claim is expressed as a means or step for performing a specified function without reciting structure, it "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. s. 112, para. 6. This two-step inquiry involves determining (1) whether s. 112, para. 6 applies and, if it does, (2) identifying the claimed function and corresponding structures in the written description. Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1360 (Fed.Cir.2000).

Because the terms "means" is used in the terms "locking means," "first locking means," and "second locking means," the presumption that they are means-plus-function terms under s. 112, para. 6 applies. With respect to the "first locking means," the Court concludes that its function is to prevent the panels from being displaced in relation to each other in the D1 or vertical direction (when the panels are on the floor). The structure corresponding to the recited function is a tongue and groove.

Pergo's proposed definition of "first locking means" is overly restrictive and reads limitations into the term. However, the Court concludes that in claims that refer to "first" and "second" locking means, the "first" locking means refers to locking the panels to prevent relative movement of the panels in a vertical direction; i.e., perpendicular to the floor, as to which play is not relevant.

With respect to the term "second locking means," the Court concludes that there is sufficient structure to overcome the presumption. In so concluding, the Court relies on claim 1 of the '267 patent in which the "second locking means" provides detailed descriptions of the structures that perform the function. Examples of the structures that are well-described are "locking strip," "locking groove," and "locking element." Additionally, for claims that use the terms "first locking means," and "second locking means," play is implicated in the "second locking means" only.

'410 Patent-Systems Patent

Claims 1, 13, 14, 26 and 27

The Plaintiffs assert that there are two parts to the term "locking means" in claims 1, 13, and 26 of the '410 patent. They state there is a means-plus-function limitation relating to the first mechanical connection for which the corresponding structure is a tongue and a groove and a second part related to the second connection that is not governed by s. 112 para. 6 because of the recitation of the structure that forms the second connection and that the components of second connection-"locking groove," "flexible," "resilient," "one-way snap lock," "strip," and "snaps up" are construed elsewhere. (Pls.' Open Br. 26-30; Joint Comparison of Proposed Claim Constructions 3.) With respect to the second mechanical connection, the Plaintiffs state that the limitation in question contains much structure and, therefore, is outside the ambit of s. 112, para. 6 because of the recitation of the basic structural elements that form that connection; i.e, the locking groove, locking strip, and locking element.

With respect to claim 1, 13, 14, 26, and 27 of the '410 patent, Pergo asserts that "locking means" should be construed under 35 U.S.C. s. 112 para. six as having the same or equivalent structure as a recess on one panel edge and locking tongue on another panel edge forming a mechanical connection in the vertical direction, and including a "locking element" of one panel and a "locking groove" of another panel forming a "second mechanical connection" in the horizontal direction and a "one-way snap lock." (Unilin's Open. Br. 40.) Pergo states that as recited in claims of the '410 patent, the term "locking means" carries out the function of "forming a first mechanical connection for locking said adjacent edges to each other in a vertical direction," and the function of "forming a second mechanical connection for locking said adjacent edges to each other in a horizontal direction at right angles to said edges." (Id. (quoting '410 patent, claim 1).) It states that "locking means" "operate[s] as a one-way snap lock." (Id.)

Pergo relies upon the presumption created by the use of word "means," FN18 and states that in the Pervan patents, as shown in Figure 1, the first function of "forming a first mechanical connection" to prevent vertical separation of joined panels is provided by inserting the "locking tongue" of the groove panel into the

"laterally open recess" of the strip panel formed between the upper edge of the strip panel and the upper face of the strip. (7:51-58.)

FN18. Pergo, through the adopted Unilin brief, relies upon *Desa IP*, *LLC*, *v*. *EML Techs.*, *LLC*, No. 06-1168, 2007 U.S.App. LEXIS 256, 2007 WL 28393 (Fed.Cir. Jan. 4, 2007). The decision states that it was issued as unpublished or nonprecedential and may not be cited as precedent. However, because the decision was issued after January 1, 2007, there is no prohibition against its citation. *See* Fed. R.App. P. 32.1; Fed. Cir. L.R. 32.1.

Pergo states that the second function of "forming a second mechanical connection" to lock panels together horizontally, including a one-way snap lock, is performed by the combination of the locking element and locking groove. Pergo states that no other structures are described to perform either of these functions. Thus, Pergo contends that a person of ordinary skill in the art of the '410 patent would understand the "locking means" to have the structure of the "locking tongue" and "laterally open recess," as well as the "locking groove" and "locking element," as each of those structures is disclosed in the Pervan patents. Pergo also states that because the term "locking means" is associated with structures that permit displacement and disassembly of floor panels, the term "locking means" includes the presence of play even without applying 35 U.S.C. s. 112 para. 6, citing Alloc, 342 F.3d at 1372.

Claim 1 of the '410 patent states in pertinent part:

locking means for forming a first mechanical connection for locking said adjacent edges to each other in a vertical direction, and for forming a second mechanical connection for locking said adjacent edges to each other in a horizontal direction at right angles to said edges, said locking means including: (i) a locking groove extending parallel to and spaced from a first one of the adjacent edges of one of the adjacent floor panels and being open at a rear side of said one an adjacent floor panel, and (ii) a flexible and resilient locking strip integrated with another of the adjacent floor panels, said locking strip extending throughout substantially an entire length of an edge of the another adjacent floor panel, said locking strip being provided with a locking element projecting from the locking strip, said locking means being constructed so as to operate as a one-way snap lock in said horizontal direction during the assembly of said flooring system when displacing said adjacent edges towards each other by resiliently urging the flexible locking strip downwards until the upper corner portions of said adjacent edges have been brought into complete engagement with each other and the locking element thereby snaps into the locking groove to prevent drifting apart of said adjacent edges, and said locking means also being constructed so as to enable said adjacent panels, while they are mechanically connected to each other by said first and second mechanical connections, to be turned in relation to each other about said upper corner portions of their locked-together edges in an angular direction so as to move the locking element out of the locking groove in order to unlock said one-way snap lock.

('410 patent, 10:35-68;11:1-9.) (Emphasis added.)

Having carefully considered the applicable claims construction principles and the claims, the Court concludes that "locking means" is a means-plus-function limitation relating to the first mechanical connection for which the corresponding structure is a tongue and a groove, but the second part related to the second connection is not governed by s. 112 para. 6 because of the recitation of the structure that forms the second connection and the elements that comprise it.

4. Locking Device

The term "locking device" appears in '579 patent claims 1, 2, 4, 8 through 11, 13, 17, 21, 22, and 28, and in RE '439 patent claims 1, 21, 22, and 33. The Plaintiffs assert that the proper construction is a locking element alone (as recited in the claim) or a locking element and a locking groove that together hold together two panels against separation. (Pls.' Open. Br. 25.)

Pergo proposes that "locking device" should be defined as "the parts that form the second mechanical connection comprising a strip, integrated with one panel, that has a locking element and a locking groove, on the underside of the mating floor panel, whereby the locking groove is inserted into the locking groove (i) the two panels are locked in the horizontal direction parallel to the principal plane of the panels and at right angles to the joint edges and (ii) a play exists allowing the joined panels to slide movably (i.e., be displaced) along the joined edges and disassembled by being rotated about the joint edge." (Unilin's Open. Br. 21-22.) In so contending, Pergo relies upon the Pervan specification as describing the locking device, as follows:

a *locking device* arranged on the rear side of the panels forms a second mechanical connection locking the panels to each other in a second direction parallel to the principal plane and at right angles to the joint edges, said *locking device* comprising a locking groove which extends parallel to and spaced from the joint edge of one of said panels, termed groove panel, and which is open at the rear side of the groove panel,

* * *

the *locking device* further comprises a strip integrated with the other of said panels, ..., such that when the panels are joined together, the strip projects on the rear side of the groove panel with its locking element received in the locking groove of the groove panel.

(RE '439 patent 4:1-18) (Emphasis added).)

Pergo states that in short, the "locking device" comprises "a strip" with a locking element," located on one panel, and a "locking groove," located on a mating panel, arranged so as to form the "second mechanical connection." The "second mechanical connection" requires that "a play exists between the locking groove and the locking surface on the locking element" that "is operative." (RE '439 patent 4:19-23.)

Having considered Pergo's proposed two-part definition, the Court concludes that the first part is overly detailed and imports the specification as demonstrated by claim 1 of the RE '439 patent. However, the second part of Pergo's proposed definition that includes the concept of play is consistent with *Alloc* and this Court's interpretation of the import of that decision. The Plaintiffs' suggested definition is also consistent with the claim terms and specification.

"Device" is defined as "[a] mechanism designed for specific uses." *McGraw-Hill Dictionary of Scientific and Technical Terms*, 553. Therefore, the Court interprets "locking device" as meaning "a mechanism consisting of a locking element alone (as recited in the claim) or a locking element and a locking groove that together hold together two panels against separation such that play exists."

5. Locking Surface

The next term for interpretation is "locking surface." The term appears in claim 49 of the '410 patent; in claims 1, 10, 21, 22, 27, and 28 of the '579 patent; and in claim 1 of the RE '439 patent. Initially, the

Plaintiffs asserted that locking surface means "a surface for fastening," (Pls.' Open. Br. 34-35), stating that the Pervan specification is silent on whether the locking surfaces or the locking elements are at any particular angle, and that Pergo's argument is premised solely on figures in the patent. They asserted that it is improper to rely on the figures when any corroborating characterization is absent from the written specification.

Page nine of the joint comparison chart filed on February 17, 2009, provides the Plaintiffs' revised construction of "locking surface" as meaning "a surface that: 1) is directed or looking toward the first edge of the panel (i.e., the one that carries the strip), 2) that comes into contact with an internal surface of the locking groove[,] and 3) prevents substantial separation of the joined edges." While that construction was not argued in the Plaintiffs' briefs, the Defendants have not objected to it. Therefore, the Court has considered the Plaintiffs' revised construction.

Pergo maintains the term means "a vertical surface of the locking element that is closest to the joint surface and that can contact the opposing surface of the locking groove when the panels are pulled away from one another horizontally." (Unilin's Open. Br. 23-25.)

Pergo's definition is overly restrictive and reads restrictions into the term. The specification is silent on whether the locking surfaces or locking elements are at any particular angle. The specification section entitled "Technical Field," states that the invention is well-suited for use in the joining floor panels, but emphasizes that the invention is useful for joining other types of building panels, such as wall panels and roof slabs. If the panels were used in building a wall or a roof (depending on the slope of the roof), the directions of the panel would be different than when used to build a floor. The Plaintiffs' revised construction also reads restrictions into the term.

A dictionary definition of "surface" is "the exterior face of an object." Webster's II New Riverside University Dictionary 1165. Another definition of "surface" is "outer part." McGraw-Hill Dictionary of Scientific and Technical Terms, 1960. Considering these definitions in the context of the claims and specification, the Court construes "locking surface" as "an outer part for fastening."

6. Locking Groove

The next term for interpretation is "locking groove." The term appears in claims 1 through 3, 5, 10, 11, 12, 14, 19, 20, 23, 24, 27, 28, 31, 32, 35, 36, 39, and 40 of the '267 patent; in claims 2, 4, 6, and 8 of the '907 patent; in claims 1, 13, 14, 26, 27, 39, 40, 41, 49, and 50 of the '410 patent; in claims 1, 3, 4, 7 through 10, 12, 13, 16, 17, 21 through 23, and in claim 28 of the '579 patent; and, in claims 1, 16, 21, 22, 33, and 34 of the RE '439 patent.

The Plaintiffs maintain that "locking groove" means a channel or depression for fastening, contending that the Court should not read a "vertical" or a "90 degree" limitation into the claims. They state that the Court should rely on the meaning of "lock," which means fasten or hold fast, and the generally understood meaning of "groove." (Pls.' Open. Br. 34-35.) Pergo maintains that "locking groove" should be construed as "an open or recessed portion on the underside of a panel spaced away from the joint edge and configured to receive the locking element, including a surface closest to the joint edge making a right angle with the underside of the groove panel, and configured so that a play exists between the locking groove and the locking element." (Unilin's Open. Br. 25-26.)

Pergo's proposed definition of "locking groove" reads limitations into the claim term that are not supported by the specification. There is no particular panel position inherent in the term. An ordinary meaning of groove is "channel." Webster's II New Riverside University Dictionary 550. "Groove" is also defined as "a long, narrow channel on a surface." McGraw-Hill Dictionary of Scientific and Technical Terms, 879. The Court construes "locking groove" as "a channel for fastening" which is consistent with the ordinary meaning of the terms and the specification.

7. Locking Strip

Pergo also states that the Court should construe "locking strip" as used in claims 39, 48, 50, 53, 54, 57, 58, and 61 of the '410 patent, but proposes no definition of the term. The Court infers that Pergo's concern is that the term include play. The Court has determined that play is included. The Court has also defined locking as "fastening," *see supra* at 30-31, and, as will be explained, defines "strip" as "a relatively long narrow piece," *see infra* at 72. Thus, the Court defines "locking strip" as "a relatively long fastening piece which allows play."

8. Second Mechanical Connection

"Second mechanical connection" is the next term for construction. The term appears in claims 1, 13, 14, 26, 27, 39, 40, 41, 49 and 50 of the '410 patent; in claims 1, 10, 21, 22 and 28 of the '579 patent; and, in claims 1, 16, 21, 22, 33, and 34 of the RE '439 patent.

The Plaintiffs contend that "second mechanical connection" should be defined as "structures that lock the panels to each other in the direction parallel to the principal plane and at right angles to the joint edges." (Pls.' Open. Br. 30-32.) Pergo maintains that "second mechanical connection" means "the arrangement of the locking element projecting from the strip and the locking groove such that when the locking element is inserted into the locking groove the two panels are locked in the horizontal direction parallel to the principal plane of the panels and at right angles to the joint edges such that a play exists allowing the joined panels to slide movably (i.e., be displaced) along the joined edges and disassembled by being rotated about the joint edge." (Unilin's Open. Br. 18-21.)

In considering the parties' proposed definitions of "second mechanical connection," the Court notes that the Plaintiffs' proposed definition does not include "play" which is inherent in all the claims of the patents-insuit. The specification explains that in the second mechanical connection a "play exists between the locking groove and a locking surface on the locking element that is facing the joint edges and is operative in said second mechanical connection" and "that the first and the second mechanical connection both allow mutual displacement of the panels in the direction of the joint edges." ('579 patent, 4:19:23; 4:24-26.) As described in the specification, "the second mechanical connection is so conceived as to allow the locking element to leave the locking groove if the groove panel is turned about its joint edge angularly away from the strip." ('579 patent, 4:27-30).

The first portion of the Pergo's proposed definition is consistent with the specification. However, the latter portion of Pergo's definition is subsumed by the Court's definition of play and, therefore, is surplusage. *See* infra at 64. Thus, the Court defines "second mechanical connection" as "the arrangement of the locking element projecting from the strip and the locking groove such that when the locking element is inserted into the locking groove the two panels are locked in the horizontal direction parallel to the principal plane of the panels and at right angles to the joint edges such that a play exists."

9. Means for Mechanically Locking and Means on the First Edge and the Second Edge for Forming a First Mechanical Connection Locking the First and Second Edges Together in a First Direction at Right Angles to a Principal Plane of the Panels

The next term for construction is "means for mechanically locking" in claims 39 and 50 of the '410 patent, and "means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges together in a first direction at right angles to a principal plane of the panels" in claim 1 of the '579 patent.

With respect to claims 39 and 50 of the '410 patent, the Plaintiffs contend that the means clause recites sufficient structure in the form of the "first mechanical connection" to overcome the presumption that s. 112, para. 6 applies. They contend that the structure is the first mechanical connection and that, therefore, the limitation refers to a first mechanical connection. However, they also contend that if the Court deems the reference to first mechanical connection to be insufficient to overcome the presumption of applicability, it is clear that the corresponding structure is a tongue and groove that restricts relative movement of the panels in the first direction; i.e., perpendicular to the plane of the panels. (Pls.' Open. Br. 29.)

Pergo maintains that "means for mechanically locking" should be construed under s. 112 para. 6 as having the same or equivalent structure as a recess on one panel edge and a locking tongue on another panel edge forming a mechanical connection in the vertical direction. (Unilin's Open. Br. 41-42.) It also states the term "means on the first edge and the second edge for forming" in '579 patent claim 1 should be construed so that the structure associated with the term is the same as the structure associated with "means for mechanically locking." (Pergo's Responsive Br. 8 n. 7.)

Pergo asserts that the term carries out the function "forming [a] first mechanical connections between the panels" by "locking together their long edges as well as their short edges in a first direction at right angles to a principal plane of the panels." (Unilin's Open. Br. 40 (citing '410 patent, claim 39).) Pergo states that no structure for this function is recited and, therefore, the term "means for mechanically locking,' should be construed under 35 U.S.C. s. 112 para. 6 to cover the structure disclosed in the patent's specification for performing the claimed function, as well as equivalents of that structure. (Unilin's Open. Br. 40 (citing DESA, 2007 U.S.App. LEXIS 256, at *9-*12).)

Pergo states that as with "locking means" the function of "forming a first mechanical connection" for vertical locking is provided by inserting the "locking tongue" of the groove panel into the "laterally open recess" of the strip panel formed between the upper edge of the strip panel and the upper face of the strip. (Unilin's Open. Br. 40.) Accordingly, Pergo states that the "means for mechanically locking" should be construed to have the structure of the "locking tongue" and "laterally open recess," as each of those structures is disclosed in the Pervan patents. (Unilin's Open. Br. 40-41.)

Claim 39 of the '410 patent includes the term "means for mechanically locking" as follows:

A flooring system comprising a plurality of rectangular floor panels which are mechanically connectable to each other in parallel rows along adjacent long edges and short edges, respectively, of the panels, said floor panels being provided with *means for mechanically locking* together their long edges as well as their short edges in a first direction at right angles to a principal plane of the panels, thereby forming first mechanical connections between the panels, each panel, at a rear side thereof, being provided: (i) with a locking strip at one long edge and at one short edge, each locking strip extending throughout substantially an entire length

of the corresponding edge of the panel and being provided with a projecting locking element, and (ii) with a locking groove at an opposite long edge and at an opposite short edge, each locking groove extending parallel to and spaced from the corresponding edge and being open at the rear side of the panel, said locking strips and locking grooves forming second mechanical connections locking the panels to each other in a second direction parallel to the principal plane and at right angles to the joint edges such that a locking strip of a first one of two joined panels projects on the rear side of the second panel with its locking element received in the locking groove of the second panel, the first and the second mechanical connections are so constructed as to allow mutual displacement of the panels in the direction of the long edges, the second mechanical connection along the long edges is so constructed as to allow the locking element to leave the locking groove if the panel associated with the locking groove is turned about its long edge angularly away from the strip, and each locking strip at the short edges is flexible and resilient such that two of the floor panels, having already been mechanically joined to a common long edge of a third of the floor panels, can be mechanically joined together at their adjacent short edges by displacing said two panels horizontally towards each other, while resiliently urging the flexible strip at one of said short edges downwards, until said adjacent short edges of the two panels have been brought into complete engagement with each other horizontally and the locking element at said one short edge thereby snaps into the locking groove at the adjacent short edge.

('410 patent, 14:14-59.) (Emphasis added).

Claim 1 of the '579 patent states:

mechanical locking system for locking a first edge of a first panel to a second edge of an identical second panel that are arranged on a subfloor, the mechanical locking system comprising: means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges to each other in a first direction at right angles to a principal plane of the panels; a locking device arranged on an underside of the first and the second edges, the locking device forming a second mechanical connection locking the first and the second edges to each other in a second direction parallel to the principal plane and at right angles to the edges; the locking device including a locking groove which extends parallel to and spaced from the second edge, the locking groove being open at the underside of the second edge and including an internal surface; the locking device further including a strip extending from the first edge, the strip extending throughout substantially an entire length of the first edge and being provided with a locking element projecting from the strip; the strip, the locking element, and the locking groove being configured such that when the second edge is pressed against an upper part of the first edge and is then angled down against the subfloor, the locking element can enter the locking groove; the locking element has a locking surface which faces the first edge and is configured so that it can contact the internal surface of the locking groove when the first and second edges are joined together to prevent substantial separation of the joined first and second edges; and the locking element further including an outer portion which is most distant to the joined edges and is not in contact with the locking groove when the first and second edges are joined together.

('579 patent, 10: 35-67.) (Emphasis added).

The '410 patent and the '579 patents are systems patents to which means-plus-function analysis applies. The use of the term "means" creates a rebuttable presumption that the limitation is a means-plus-function limitation. That presumption is not rebutted because, contrary to Alloc's suggestion, the "first mechanical connection" does not recite sufficient structure. "Means for mechanically locking" is a means-plus-function

limitation and the corresponding structures are a tongue and a groove that restrict relative movement of the panels in the first direction; that is, perpendicular to the plane of the panels. "Means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges to each other in a first direction at right angles to a principal plane of the panels" is similarly construed as a means-plus-function limitation and the corresponding structures are a tongue and a groove that restrict relative movement of the panels in the first direction; i.e., perpendicular to the plane of the panels.

10. One-Way Snap Lock

The Court now considers the construction of the term "one-way snap lock" that appears in claims 1, 13, 14, 26, and 27 of the '410 patent. The Plaintiffs contend that the term means "a fastening device that closes with a catch and that once closed, cannot be opened by applying the reverse of the motion used to close the device." (Pls.' Open. Br. 35-36.)

Pergo asserts that one-way snap lock means "a lock in which two panels, having abutting vertical surfaces on their locking elements and locking groove, are snapped together by moving one panel horizontally toward the other, and once joined cannot be pulled apart without damaging the joint." (Unilin's Open. Br. 47.) In proposing its definition, Pergo relies on claim 1 of the '410 patent which states "said locking means being constructed so as to operate in as a snap lock in said horizontal direction during assembly of the panels." (Id. (quoting '410 patent, 10:58-60).) Pergo also relies upon the specification statement that "the locking surface 10 of the locking element 8 serves as a stop with respect to the surface of the locking groove 14 closest to the joint edge 4." (Id. (quoting '410 patent, 7:37-39).) Pergo asserts that if one or more surfaces are not vertical, the joint may be pulled together by a horizontal force.

The Plaintiffs' proposed definition is consistent with the claim language and the ordinary meaning of the terms "one-way snap lock." Pergo's suggestion that "vertical" should be included in the definition would improperly read language from the specification describing the preferred embodiment into the claim and is rejected. See Phillips, 415 F.3d at 1323. One-way means permitting in one direction only. Webster's II New Riverside University Dictionary 821. "Snap" means to open or close with a click. Id. at 1100. Considering these ordinary definitions in the context of the claims and specification as a whole, the Court construes "one-way snap lock" as meaning "a fastening device that closes with a catch and that once closed, cannot be opened by applying the reverse of the motion used to close the device."

11. Displacing, Displacement, and Displaceable

This section of the decision addresses the related terms displacing, displacement, and displaceable. "Displacing" appears in claims 1(d), 10(d), 19(c), 23(c), 27(d), 31(d), 35(c), and 39(c) of the '267 patent. "Displacement" appears in claims 39, 49, and 50 of the '410 patent; and, in claims 1, 21, and 22 of the RE '439 patent. "Displaceable" appears in claims 1, 3, 5, 7, 12, 13, and 14 of the '907 patent.

Relying on the ordinary meaning of the terms, the Plaintiffs assert that displacing means "putting something in a different place;" displacement is the "process of being put into a different place;" and, "displaceable" means "the capability of being put in a different place." (Pls.Open.Br.36-37.) The Plaintiffs also contend that displaceable is not restricted to "no appreciable force." (Id.)

Pergo maintains that "displacing" in the context of the '267 patent claims means "easily sliding joined panels relative to one another along their joined edges, because a play exists between the joined edges," and "displaceable" means "the joined panels can easily slide relative to one another along their joined edges

because a play exists between the locking groove and the locking element." (Unilin's Open. Br. 27-31.) Pergo also states that "displacement" should be defined with respect to RE '439 patent claims 1, 21, and 22 as "the joined panels can easily slide relative to one another along their joined edges because a play exists between the locking groove and the locking element," (Unilin's Open. Br. 32.), and with respect to claims 29, 49, and 50 of the '410 patent as "so constructed to allow the mutual displacement of the panels in the direction of the long edges." (Pergo's Reply Br. Ex. F 1.)

The Court notes that "unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant art." Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n, 383 F.3d 1352, 1364 (Fed.Cir.2004). The ordinary and customary meaning of a claim term may be determined by reviewing a variety of sources, which may include the claims themselves; dictionaries and treatises; and, the written description, the drawings, and the prosecution history. *Id.* The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." Embrex, Inc., v. Serv. Eng'g Corp., 216 F.3d 1343, 1347 (Fed.Cir.2000) (internal quotations and citation omitted).

Claim 39 of the '410 patent includes the terms "displacement" and "displacing" as follows:

A flooring system comprising a plurality of rectangular floor panels which are mechanically connectable to each other in parallel rows along adjacent long edges and short edges, respectively, of the panels, said floor panels being provided with means for mechanically locking together their long edges as well as their short edges in a first direction at right angles to a principal plane of the panels, thereby forming first mechanical connections between the panels, each panel, at a rear side thereof, being provided: (i) with a locking strip at one long edge and at one short edge, each locking strip extending throughout substantially an entire length of the corresponding edge of the panel and being provided with a projecting locking element, and (ii) with a locking groove at an opposite long edge and at an opposite short edge, each locking groove extending parallel to and spaced from the corresponding edge and being open at the rear side of the panel, said locking strips and locking grooves forming second mechanical connections locking the panels to each other in a second direction parallel to the principal plane and at right angles to the joint edges such that a locking strip of a first one of two joined panels projects on the rear side of the second panel with its locking element received in the locking groove of the second panel, the first and the second mechanical connections are so constructed as to allow mutual displacement of the panels in the direction of the long edges, the second mechanical connection along the long edges is so constructed as to allow the locking element to leave the locking groove if the panel associated with the locking groove is turned about its long edge angularly away from the strip, and each locking strip at the short edges is flexible and resilient such that two of the floor panels, having already been mechanically joined to a common long edge of a third of the floor panels, can be mechanically joined together at their adjacent short edges by displacing said two panels horizontally towards each other, while resiliently urging the flexible strip at one of said short edges downwards, until said adjacent short edges of the two panels have been brought into complete engagement with each other horizontally and the locking element at said one short edge thereby snaps into the locking groove at the adjacent short edge.

('410 patent, 14:14-59.) (Emphasis added).

The Plaintiffs' definitions of the displacement terms are vague. Moreover, their definitions are not presented within the context of the specification or the patent claims.

Pergo's proposed definitions relate to the patent claims and specification. Each of Pergo's proposed definitions of the terms include some form of the word "slide." In discussing the role of "play" in the invention, Alloc, 342 F.3d at 1369, states that the specification teaches that play permits displacement between the components of the locking joint; i.e., allows the panels to "slide" relative to one another. The court also noted that the prosecution history for the '621 parent patent indicated that representations distinguishing the invention from the prior art were based on the invention's ability to displace panels ("slide movably") and to release adjacent panels by rotation about the joint. Id. at 1371.

The term "slide" means "to move over a surface while maintaining a smooth, continuous contact." Webster's II New Riverside University Dictionary, 1094. Some ease of movement is inherent in the term slide. Pergo has not shown that the modifier "easily" is supported by the patent claims or specification. "Play" permits displacement. However, there is no basis for including "play" in the definition of the displacement terms. Although Pergo has suggested rather elaborate proposed definitions, it also succinctly states that "displacement refers to the ability of two panels to slide alongside of each other along their joined edge." (Unilin's Open. Br. 28.) (Emphasis added). Based on the claims, the specification, and Alloc, the Court construes the noun "displacement" as "the act of sliding movably" The verb "displacing" is construed as "sliding movably." The Court further construes "displaceable" as "having the capability of sliding movably."

12. Internal Surface

Next for interpretation by the Court is the term "internal surface" that appears in claims 1, 10, 21, 22, and 28 of the '579 patent. The Plaintiffs state that the term means "an interior face." (Pls.' Open Br. PX-1 3.) Pergo states that "internal surface" means "an inner surface of the locking groove closest to the joint edge making a right angle with the underside of the groove panel, and configured so that a play exists between the internal surface and a locking surface of the locking element." (Unilin's Open. Br. 25-26.)

Claim 1 of the '579 patent states:

A mechanical locking system for locking a first edge of a first panel to a second edge of an identical second panel that are arranged on a subfloor, the mechanical locking system comprising: means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges to each other in a first direction at right angles to a principal plane of the panels; a locking device arranged on an underside of the first and the second edges, the locking device forming a second mechanical connection locking the first and the second edges to each other in a second direction parallel to the principal plane and at right angles to the edges; the locking device including a locking groove which extends parallel to and spaced from the second edge, the locking groove being open at the underside of the second edge and including an internal surface; the locking device further including a strip extending from the first edge, the strip extending throughout substantially an entire length of the first edge and being provided with a locking element projecting from the strip; the strip, the locking element, and the locking groove being configured such that when the second edge is pressed against an upper part of the first edge and is then angled down against the subfloor, the locking element can enter the locking groove; the locking element has a locking surface which faces the first edge and is configured so that it can contact the internal surface of the locking groove when the first and second edges are joined together to prevent substantial separation of the joined first and second edges; and the locking element further including an outer portion which is most distant to the joined edges and is not in contact with the locking groove when the first and second edges are joined together.

('579 patent, 10: 35-67.) (Emphasis added). The key portions of the proposed definitions of the Plaintiffs and Pergo are similar-"interior face" and "inner surface." However, the Plaintiffs' proposed definition is preferable since it does not include the word "surface" that is part of the phrase which it defines. The remaining portions of Pergo's definition are drawn from the specification's discussion of the figures or preferred embodiments and are not central to the claimed invention. Therefore, the Court defines "internal surface" as "interior face."

13. Sufficient Space

The next term for construction is "sufficient space" as it appears in claim 33 of the RE '439 patent. The Plaintiffs contend that the term means "enough room in the groove so that the panels can be moved relative to one another along their joined edges." (Pls.' Open Br. 33.) Pergo contends that it means "the amount of space between the locking groove and the locking element is enough to allow for the free movement of the joined panels such that the panels can (i) slide easily relative to one another along their joined edges and (ii) can be disassembled by angular rotation of one panel about the other joined edge." (Unilin's Open. Br. 33-34.)

Claim 33 of the RE '439 patent provides:

A system for providing a joint between adjacent building panels, comprising:

each of said building panels including a first edge and a second edge such that the first edge of each of said building panels forms a first mechanical connection with the second edge of an adjacent one of the building panels locking the first and second edges of the building panels to each other in a first direction at right angles to a principal plane of the panels, and a locking device arranged on a rear side of the building panels forming a second mechanical connection locking the building panels to each other in a second direction parallel to the principal plane and at right angles to the first and second edges, said locking device fitting within a locking groove extending parallel to and spaced apart from the first edge of said building panels, and which locking groove is open at the rear side of the building panels, the locking device comprising a strip formed at the second edge of each of said building panels, said strip extending throughout substantially an entire length of the second edge and being provided with a locking element projecting from the strip, such that when two adjacent building panels are joined together, the strip projects from the rear side of the second edge of the panels with its locking element received in the locking groove of an adjacent building panel, and the locking groove and the locking element being dimensioned such that when adjacent panels are joined together and the locking element is received within the locking groove, there is sufficient space within the locking groove to allow mutual displacement of the adjacent panels in a direction of the first and second edges and to enable the locking element to leave the locking groove if the respective building panel is turned about its first edge angularly away from the locking strip.

(RE '439 patent, 14:38-67.) (Emphasis added).

The Plaintiffs maintain that the Court should construe sufficient space as not including play and construe the limitation based on its plain meaning. However, this Court has determined that play is inherent in the RE '439 patent claims. In large part, Pergo's proposed construction is consistent with the claim language. However, there is no basis for reading "free" movement into the definition of the term. The Court defines "sufficient space" in claim 33 of the RE '439 patent as "the amount of space between the locking groove and the locking element is enough to allow for the movement of the joined panels such that the panels can (i)

slide relative to one another along their joined edges and (ii) can be disassembled by angular rotation of one panel about the other joined edge."

14. Play

The next term for definition is "play" in claim 49 of the '410 patent, in claims 2 and 11 of the '579 patent, and in claim 1 of the RE '439 patent. The Plaintiffs contend that play means "a dimensional relationship of the locking surfaces of interlocking panels such that the locking surfaces can be displaced or slide relative to one another in the direction of their joined edges." (Pls.' Open. Br. 38.) FN19 Pergo contends that "play" means "an intentional space allowing for free movement, displacement or sliding of joined panels relative to each other along adjacent joined edges." (Unilin's Open. Br. 35-36.)

FN19. The Plaintiffs also argue that play should not be read into the claims of all five patents-in-suit, contending that it is only referenced three times in the specification. (Pls' Open. Br. 37-38.) This Court relies on its interpretation of the scope and import of *Alloc* and will not further address the argument.

Claim 1 of the RE '439 patent states:

A system for providing a joint between adjacent building panels, comprising: each of said building panels including a first edge and a second edge such that the first edge of each of said building panels forms a first mechanical connection with the second end of an adjacent one of the building panels locking the first and second edges of the building panels to each other in a first direction at right angles to a principal plane of the panels, and a locking device arranged on a rear side of the building panels forming a second mechanical connection locking the building panels to each other in a second direction parallel to the principal plane and at right angles to the first and second edges, said locking device fitting within a locking groove extending parallel to and spaced apart from the first edge of said building panels, and which locking groove is open at the rear side of the building panels, the locking device comprising a strip integrated with the second edge of each of said building panels, said strip extending throughout substantially an entire length of the second edge and being provided with a locking element projecting from the strip, such that when two adjacent building panels are joined together, the strip projects from the rear side of the second edge of the panels with its locking element received in the locking groove of an adjacent building panel, the building panels, when joined together, can occupy a relative position in said second direction where a play exists between the locking groove and a locking surface on the locking element that is facing the first and second edges and is operative in said second mechanical connection, the first and the second mechanical connections both allow mutual displacement of the building panels in a direction of the first and second edges, and the second mechanical connection enables the locking element to leave the locking groove if the respective building panel is turned about its first edge angularly away from the strip.

('439 patent, 10:35-67.) (Emphasis added).

The parties' proposed definitions are similar. The Plaintiffs object to the inclusion of "intentional" and "free movement." The *Alloc* court did not revise the construction of "play" as being "space between the locking groove on a first panel and a locking element on a panel adjacent to the first panel." 342 F.3d at 1367. Play allows the displacement and disassembly of the panels. The Plaintiffs' use of the phrase "dimensional relationship" is analogous to "space," but is more cumbersome. Pergo's definition is deficient because it does not identify where the space exists. Thus, the Court defines "play" as meaning "space between the locking

surfaces of interlocking panels such that the locking surfaces can be displaced relative to one another in the direction of their joined edges."

15. Small Play

The next term for construction is "small play" as used in claims 2 and 11 of the '579 patent. The Plaintiffs contend it would be error to include any specific dimensional requirement in small play. Pergo maintains that small play means an intentional space of at least 0.2 millimeters allowing for free movement, displacement or sliding of joined panels relative to each other along joined edges. (Unilin's Open. Br. 37-38.)

Claim 2 of the '579 patent claims:

The mechanical locking system as claimed in claim 1, wherein when the first and second edges are joined together with the locking device, the first and second panels can be arranged such that *a small play* exists between the first and second edges.

('579 patent, 11:5-9.) (Emphasis added).

In advocating the inclusion of the minimum space of 0.2 millmeters in the definition of "small play," Pergo relies upon the specification which states:

In order to permit taking up previously laid, joined floor panels in a simple way, a preferred embodiment of the invention is characterised [sic] in that when the groove panel is pressed against the strip panel in the second direction and is turned anglularly [sic] away from the strip, the maximum distance between the axis of rotation of the groove panel and the locking surface of the locking groove closest to the joint edges is such that the locking element can leave the locking groove without contacting the locking surface of the locking groove. Such a disassembly can be achieved even if the aforementioned play between the locking groove and the locking surface is not greater than 0.2 mm.

('579 patent, 5 :22-33.) (Emphasis added.)

Pergo's interpretation of small play is drawn from the specification. However, the quoted portion of the specification does not include the phrase "small play." When a claim term is expressed in general descriptive words, the term typically will not be limited to a numerical range that may appear in the written description as referring to a preferred embodiment or in other narrower claims.

Mathematical precision should not be imposed for its own sake; a patentee has the right to claim the invention in terms that would be understood by persons of skill in the field of the invention." Modine Mfg. Co. v. U.S. Int'l Trade Comm'n, 75 F.3d 1545, 1551 (Fed.Cir.1996), abrogated on other grounds, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 234 F.3d 558 (Fed.Cir.) (en banc) *rev'd* 535 U.S. 722, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002). Because 0.2 millimeters is discussed in the specification and it is not discussed in conjunction with "small play," the Court declines to impute a numerical limitation to the term. *See* Modine Mfg., 75 F.3d at 1551.

"Small" is defined as "having a relatively little size or slight dimension." See Webster's II New Riverside University Dictionary 1097. The Court defines "small play" by pairing its construction of "play" with the

ordinary meaning of "small." Thus, "small play" is construed to mean "a relatively little space between the locking surfaces of interlocking panels such that the locking surfaces can be displaced relative to one another in the direction of their joined edges."

16. Flexible, Resilient, and Resiliently Urging

The next group of terms for construction are flexible, resilient, and resiliently urging. These terms are used in various combinations in '410 patent claims 1, 4, 5, 8, 9, 12, 13, 17, 18, 21, 22, 25, 26, 30, 31, 34, 35, and 38 (flexible and resilient locking strip); in '410 patent claims 39, 48, 50, 53, 54, 57, 58, and 61 (locking strip ... is flexible and resilient); in '410 patent dependent claim 42 (flexible strip); in '410 patent claims 1, 13, and 26 (resiliently urging the flexible locking strip); in '410 patent claims 40 and 50 (resiliently urging the flexible strip at one of said short edges); in RE '439 patent claim 42 (flexible resilient material); and, in '907 patent claim 9 (resilient locking strip). These terms are used in claims providing for the snap joining of panels.

The Plaintiffs assert that "resilient" means "springing back or rebounding" and "flexible" means "capable of being bent, usually without breaking" relying on the common meaning of the words. (Pls.' Open. Br. 36.) Pergo proposes that "a flexible and resilient strip is one made out of a material that at the time of the invention was known to be capable of repeatedly bending and then returning to its original shape and position, such as aluminum or other metals, or plastics." (Unilin's Open. Br. 42-46.) Pergo maintains that the definition should not include "particle board" or other wood based material.

In arguing for its interpretation of the terms, Pergo relies upon the patent specification and the ordinary meaning of the terms flexible and resilient. In addition, Pergo proffers the declaration of Joseph R. Loferski, Ph.D. ("Loferski"), a professor of the Department of Wood Science and Forest Products at Virginia Polytechnic Institute, in Blacksburg, Virginia. (Unilin's Open Br. Ex. 17.) Loferski indicates that, based on what was known about high density fiberboard ("HDF") and medium density fiberboard ("MDF") at the time the first Pervan patent was filed in 1994, one skilled in the art would believe that making floor panels with snap-locking elements formed of HDF and MDF was not possible. (Ex. 17 para. 22.)

Claim 39 of the '410 patent, previously quoted in full, includes the terms "flexible," "resilient," and "resiliently urging" as follows:

the first and the second mechanical connections are so constructed as to allow mutual displacement of the panels in the direction of the long edges, the second mechanical connection along the long edges is so constructed as to allow the locking element to leave the locking groove if the panel associated with the locking groove is turned about its long edge angularly away from the strip, and each locking strip at the short edges is *flexible and resilient* such that two of the floor panels, having already been mechanically joined to a common long edge of a third of the floor panels, can be mechanically joined together at their adjacent short edges by displacing said two panels horizontally towards each other, while *resiliently urging* the flexible strip at one of said short edges downwards, until said adjacent short edges of the two panels have been brought into complete engagement with each other horizontally and the locking element at said one short edge thereby snaps into the locking groove at the adjacent short edge.

('410 patent, 14:39-46.) (Emphasis added). "Flexible" means "capable of being bent or flexed." Webster's II New Riverside University Dictionary 487. "Resilient" is a synonym for "flexible." See id. "Resilience" means "the property of a material that enables it to regain its original shape or position after being bent,

stretched, or compressed." *See* id. at 1000. The definition of "urging" includes "to exert an impelling force ." Id. at 1271.

The invention is described as being well suited for use in joining floor panels, especially thin laminated floors. ('410 patent, 1:28-29.) The specification states that the invention provides a system for making a joint along the adjacent floor panels in which the "locking device further comprises a strip integrated with the other of said panels, termed strip panel, said strip extending throughout substantially the entire length of the joint edge of the strip panel and being provided with a locking element projecting from the strip, such that when the panels are joined together, the strip projects on the rear side of the groove panel with its locking element received in the locking groove of the groove panel." ('410 patent, 4:10-20.)

In discussing the strip, the specification states: "Preferably, the strip may consist of a material which is flexible, resilient and strong, and can be sawn. A preferred strip material is sheet aluminium." ('410 patent, 5 :18-20.) Such discussion of the strip materials is not limited to a particular method of joining the panels-e.g., angling the panels or by snapping the panels.

In discussing the preferred embodiments, the specification refers to Figures 1 a and 1b and to Figures 4a and 4b showing the basic design of the panels and states:

The strip 6, which is made of flexible, resilient sheet aluminium, can be fixed mechanically, by means of glue or in any other suitable way. In FIGS. 1a and 1b, the strip 6 is glued, while in FIGS. 4a and 4b it is mounted by means of a mechanical connection, which will be described in more detail herein below. Other strip materials can be used, such as sheets of other metals, as well as aluminium or plastics sections. Alternatively, the strip 6 may be integrally formed with the strip panel 1.

('410 patent, 7:4-13.) (Emphasis added). An integrally formed strip could be formed of laminate, which the specification described as the material used in the panel itself. (See '410 patent, 6:53-55.)

Reading the claim terms in the context of the specification, the Court is not persuaded that the terms "flexible," "resilient," and "resiliently urging" should be construed as excluding "particle board" or other wood-based material. The terms should be given their ordinary meaning as one skilled in the art at the time of the invention would understand them. The noun "laminate" is defined as "a laminated product, as plywood." *Webster's II New Riverside University Dictionary* 674. "Plywood" is a wood based material. *See* id. at 906.

The qualities embodied by the terms "flexible," "resilient," and "resiliently urging," inherently limit the material types without the need further for specific limitations that are not provided for by the patent specification or claims. Loferski's declaration is extrinsic evidence, which may not be used to contradict the intrinsic evidence. *See* Phillips, 415 F.3d at 1318. Furthermore, Loferski's opinion relies, in part, upon Unilin's European patent for the MDF invention-adding an additional layer of extrinsic evidence. Pergo's inclusion of the adjective "repeatedly" to modify bending is not supported by the ordinary meaning of "flexible." Thus, the Court construes "flexible and resilient strip" as "one made out of a material that at the time of the invention was known to be capable of bending and then returning to its original shape and position." "Flexible" means "capable of being bent or flexed." "Resilient" means "able to regain its original shape or position after being bent, stretched, or compressed." "Resiliently urging" means to "exert an impelling force which allows it to regain its original shape or position."

17. Strip

The next term for construction is "strip" in all claims.FN20 The Plaintiffs maintain that strip means "a relatively long narrow piece of something." (Pls.' Open Br. 36.) Pergo states that "strip" means "a component integrated with the floor panel which after joining, is flat and situated either flush with or slightly below the underside of the panel." (Unilin's Open. Br. 48-49.)

FN20. Pergo has requested construction of the term "strip" in a more limited group of claims. (*See* Unilin's Open. Br. 48.) One of the claims for which a construction of strip is requested is claim 1 of the '579 patent.

Claim 1 of the '579 patent states:

A mechanical locking system for locking a first edge of a first panel to a second edge of an identical second panel that are arranged on a subfloor, the mechanical locking system comprising: means on the first edge and the second edge for forming a first mechanical connection locking the first and second edges to each other in a first direction at right angles to a principal plane of the panels; a locking device arranged on an underside of the first and the second edges, the locking device forming a second mechanical connection locking the first and the second edges to each other in a second direction parallel to the principal plane and at right angles to the edges; the locking device including a locking groove which extends parallel to and spaced from the second edge, the locking groove being open at the underside of the second edge and including an internal surface; the locking device further including a *strip* extending from the first edge, the strip extending throughout substantially an entire length of the first edge and being provided with a locking element projecting from the *strip*; the *strip*, the locking element, and the locking groove being configured such that when the second edge is pressed against an upper part of the first edge and is then angled down against the subfloor, the locking element can enter the locking groove; the locking element has a locking surface which faces the first edge and is configured so that it can contact the internal surface of the locking groove when the first and second edges are joined together to prevent substantial separation of the joined first and second edges; and the locking element further including an outer portion which is most distant to the joined edges and is not in contact with the locking groove when the first and second edges are joined together.

('597 patent, 10:35-67; 11:1-4.) (Emphasis added).

The starting place for construction of a claim term is the claims. The Court does not interpret claim terms in a vacuum, devoid of the context of the claim as a whole. *See* Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed.Cir.1999) ("proper claim construction ... demands interpretation of the entire claim in context, not a single element in isolation."); ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1088 (Fed.Cir.2003) ("While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered.")

Review of claim 1 of the '579 patent indicates that "strip" is used in a variety of contexts. The Plaintiffs' simple broad definition fits into different contexts. However, the inclusion of the phrase "of something" does not add to the definition. "Piece" suggests that the strip is tangible, *see Webster's II New Riverside University Dictionary* 890 ("a thing regarded as a unit or element of a larger quantity or class"), as does "of something." So, the Court has omitted "of something" from its definition of strip. Pergo's proposed definition adds an unwarranted temporal limitation on the term by incorporating the position of the strip

after joining. The Court defines "strip" as a "relatively long narrow piece."

18. Snap and Snaps Up

The next terms for construction are "snap" and "snaps up" as used in claims 1, 2, 10, 11, 19, 20, 23, 24, 27, 28, 31, 32, 35, 36, 39, and 40 of the '267 patent; in claims 1, 13, 14, 26, 39, and 50 of the '410 patent; and in claim 9 of the '907 patent. Relying on the commonly understood meaning of the words, the Plaintiffs assert that "snaps up" means "fastening or closing with a click in an upward direction." (Pls.' Open. Br. 36.)

Pergo states that "snap" and "snaps up" means that the locking strip first bends downwardly and then returns back fully to its original position. (Unilin's Open. Br. 46.) Pergo relies upon the specification which states: "Laying can also be performed by first placing both the strip panel and the groove panel flat on the subfloor and then joining the panels parallel to their principal planes while bending the strip downwards until the locking element snaps up into the locking groove." ('579 patent 6:1-5.)

Pergo also relies upon a description of a preferred embodiment as follows:

FIGS. 3a-3b show another joining method for mechanically joining together the floor panels of FIGS. 2a-c. The method illustrated in FIGS. 3a-c relies on the fact that the strip 6 is resilient and is especially useful for joining together the short sides of floor panels which have already been joined along one long side as illustrated in FIGS. 2a-c. The method of FIGS. 3a-c is performed by first placing the two panels 1 and 2 flat on the subfloor 12 and then moving them horizontally towards each other according to FIG. 3b. The inclined portion 36 of the locking element 8 then serves as a guide surface which guides the joint edge 4 of the groove panel 2 up on to the upper side 22 of the strip 6. The strip 6 will then be urged downwards while the locking element 8 is sliding on the equalising [sic] surface 42. When the joint edges 3, 4 have been brought into complete engagement with each other horizontally, the locking element 8 will *snap* into the locking groove 14 (FIG. 3 c), thereby providing the same locking as in FIG. 2c.

('579 patent, 9:15-33.) (Emphasis added).

The construction of claim terms begins with the claims. See Phillips, 415 F.3d at 1312. Claim 1(d) of the '267 patent states:

displacing the new one of the panels in its longitudinal direction relative to the first panel towards a final longitudinal position wherein the locking element of one of the short edges of the new one of the panels and the second panel *snaps up* into the locking groove of the other one of the short edges, whereby the new one of the panels and the second panel are mechanically connected with each other in both in the first direction and in the second direction with respect to the thus-[sic] connected short edges.

('267 patent, 11:24-33.) (Emphasis added).

Claim 39 of the '410 patent states in relevant part:

the first and the second mechanical connections are so constructed as to allow mutual displacement of the panels in the direction of the long edges, the second mechanical connection along the long edges is so constructed as to allow the locking element to leave the locking groove if the panel associated with the locking groove is turned about its long edge angularly away from the strip, and each locking strip at the

short edges is flexible and resilient such that two of the floor panels, having already been mechanically joined to a common long edge of a third of the floor panels, can be mechanically joined together at their adjacent short edges by displacing said two panels horizontally towards each other, while resiliently urging the flexible strip at one of said short edges downwards, until said adjacent short edges of the two panels have been brought into complete engagement with each other horizontally and the locking element at said one short edge thereby *snaps* into the locking groove at the adjacent short edge.

('410 patent, 14:40-59.) (Emphasis added). Snap means "to open or close with a click." *Webster's II New Riverside University Dictionary* 1100. "Up" means "moving upward." Id. at 1267. These ordinary definitions of the terms in the context of the claims well define the terms. Pergo's proposed definition of the terms as including a "full" return to an original position, is rejected because it adds limitations that are not consistent with the ordinary meaning of the claim terms and the specification. The Court defines "snaps" as "closes with a click" and "snaps up" as "closes with a click in an upward direction."

19. Projecting

The Plaintiffs request construction of the term "projecting" as used in claims 1, 10, 27, and 31 of the '267 patent; in claims 39, 40, 41, 44, and 49 of the '410 patent; and, in claims 1, 21, 22, and 23 of the RE '439 patent. The Plaintiffs propose that the projecting be construed according to its ordinary meaning as "protruding." (Pls.' Open. Br. 35.) Pergo has not responded to the Plaintiffs' proposed definition.

Claim 39 of the '410 patent, in pertinent part, states: "with a locking strip at one long edge and at one short edge, each locking strip extending throughout substantially an entire length of the corresponding edge of the panel and being provided with a *projecting* locking element." ('410 patent, 14:22:26.) (Emphasis added). Project is defined as to "extend forward or out," and protrude is a synonym. *Webster's II New Riverside University Dictionary* 940. Therefore, the Court construes "projecting" as "protruding."

20. Facing

The Plaintiffs request construction of the term "facing" as the term is used in claim 39 of the '410 patent,FN21 and in claim 1 of the RE ' 439 patent. They propose that "facing" be defined as "to look forward or in the direction of." (Pls.' Open. Br. 35-36.) Pergo has not responded to the definition proposed by the Plaintiffs.

FN21. The Court has not located the term "facing" in claim 39 of the '410 patent. It does appear in claim 49 of the '410 patent.

Claim 1 of the 'RE '439 patent states in relevant part:

the locking device comprising a strip integrated with the second edge of each of said building panels, said strip extending throughout substantially an entire length of the second edge and being provided with a locking element projecting from the strip, such that when two adjacent building panels are joined together, the strip projects from the rear side of the second edge of the panels with its locking element received in the locking groove of an adjacent building panel, the building panels, when joined together, can occupy a relative position in said second direction where a play exists between the locking groove and a locking surface on the locking element that is *facing* the first and second edges and is operative in said second mechanical connection, the first and the second mechanical connections both allow mutual displacement of

the building panels in a direction of the first and second edges, and the second mechanical connection enables the locking element to leave the locking groove if the respective building panel is turned about its first edge angularly away from the strip.

(RE '439 patent, 10:52-67; 11:1-7.) (Emphasis added). Facing is defined as to be turned or placed with the front toward a specified direction. *Webster's II New Riverside University Dictionary* 459. Since the term refers to inanimate objects, the Court has replaced "look" with "oriented." Having considered "facing" in the context of the claims, the Court defines "facing" as "oriented in the direction of."

NOW, THEREFORE, BASED ON THE FOREGOING, IT IS HEREBY ORDERED THAT:

All the claims in the patents in suit require "PLAY;"

The Court construes the disputed terms in the patents-in-suit as follows:

- 1. "LOCKING ELEMENT" means "a projection at the edge of the panel as recited in the claim that engages a locking groove on another panel such that a play exists between the locking element and the locking groove";
- 2. "LOCKING MEMBER" means "a component of a fastening set that allows play"; "FIRST LOCKING ELEMENT" means "the component, corresponding in order to the number one, of the fastening set that allows play"; and, "SECOND LOCKING ELEMENT" means "the component, coming next after the first in order, of the fastening set that allows play";
- 3. "LOCKING MEANS" is "a means-plus-function limitation relating to the first mechanical connection for which the corresponding structure is a tongue and a groove, but the second part related to the second connection is not governed by s. 112 para. 6 because of the recitation of the structure that forms the second connection and the elements that comprise it";
- 4. "LOCKING DEVICE" means "a mechanism consisting of a locking element alone (as recited in the claim) or a locking element and a locking groove that together hold together two panels against separation such that play exists";
- 5. "LOCKING SURFACE" means "an outer part for fastening";
- 6. "FLOCKING GROOVE" means "a channel for fastening";
- 7. "LOCKING STRIP" means "a relatively long fastening piece which allows play";
- 8. "SECOND MECHANICAL CONNECTION" means "the arrangement of the locking element projecting from the strip and the locking groove such that when the locking element is inserted into the locking groove the two panels are locked in the horizontal direction parallel to the principal plane of the panels and at right angles to the joint edges such that a play exists";
- 9. "MEANS FOR MECHANICALLY LOCKING is "a means-plus-function limitation and the corresponding structures are a tongue and a groove that restrict relative movement of the panels in the first direction; that is, perpendicular to the plane of the panels"; and, "MEANS ON THE FIRST EDGE AND

THE SECOND EDGE FOR FORMING A FIRST MECHANICAL CONNECTION LOCKING THE FIRST AND SECOND EDGES TOGETHER IN A FIRST DIRECTION AT RIGHT ANGLES TO A PRINCIPAL PLANE OF THE PANELS" is "a means-plus-function limitation and the corresponding structures are a tongue and a groove that restrict relative movement of the panels in the first direction; i.e., perpendicular to the plane of the panels";

- 10. "ONE-WAY SNAP LOCK" mean "a fastening device that closes with a catch and that once closed, cannot be opened by applying the reverse of the motion used to close the device";
- 11. "DISPLACEMENT" means "the act of sliding movably," "DISPLACING" means "sliding movably," and "DISPLACEABLE" means "having the capability of sliding movably";
- 12. "INTERNAL SURFACE" means "interior face";
- 13. "SUFFICIENT SPACE" means "the amount of space between the locking groove and the locking element is enough to allow for the movement of the joined panels such that the panels can (i) slide relative to one another along their joined edges and (ii) can be disassembled by angular rotation of one panel about the other joined edge";
- 14. "PLAY" means "space between the locking surfaces of interlocking panels such that the locking surfaces can be displaced relative to one another in the direction of their joined edges";
- 15. "SMALL PLAY" means "a relatively little space between the locking surfaces of interlocking panels such that the locking surfaces can be displaced relative to one another in the direction of their joined edges";
- 16. "FLEXIBLE AND RESILIENT STRIP" means "one made out of a material that at the time of the invention was known to be capable of bending and then returning to its original shape and position"; "FLEXIBLE" means "capable of being bent or flexed"; "RESILIENT" means "able to regain its original shape or position after being bent, stretched, or compressed"; and, "RESILIENTLY URGING" means to "exert an impelling force which allows it to regain its original shape or position";
- 17. "STRIP" means a "relatively long narrow piece";
- 18. "SNAPS" means "closes with a click" and "SNAPS UP" as "closes with a click in an upward direction";
- 19. "PROJECTING" means "protruding"; and,
- 20. "FACING" means "oriented in the direction of."

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