United States District Court,
M.D. Pennsylvania.

VIDIR MACHINE INC. et al,
Plaintiffs.
v.
UNITED FIXTURES CO. et al,
Defendants.

Civil Action No. 1:04-cv-820

July 21, 2008.

Background: Assignee of patent and patentee brought patent infringement action against competitor alleging infringement of patent for rotary cutter for sheet material. Parties sought claim construction.

Holdings: The District Court, Yvette Kane, Chief Judge, held that:
(1) term "elongate member" meant a structure having a length greater than its width, which may be used to drive the rotary cutter;
(2) term "elongate flexible drive member" meant a flexible structure having a length greater than its width, such as a cable or chain, which pulls the cutter block along the length of the slot;
(3) term "rotatable guide member" meant a pulley or sprocket, either in single or double form;
(4) term "wrapped there around" meant direct the path of the elongate flexible drive member;
(5) term "rotary drive actuator" meant a motor-driven rotatable drum, pulley, or sprocket, which, as it rotates, moves the elongate flexible drive member in one of two directions; and
(6) term "connector" meant a structure that links or secures the elongate flexible drive member to the cutter block so that movement of the elongate flexible drive member will move the cutting block.

Claims construed.

6,092,450. Construed.

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MEMORANDUM

YVETTE KANE**, Chief Judge.**

In this action, Plaintiffs Vidir Machine, Inc., and Raymond Dueck (collectively "Vidir") allege that Defendants United Fixtures Co. and United Fixtures Company, Inc. (collectively "UF") have infringed upon claims of Vidir's patent, United States Patent No. 6,092,450 (filed July 25, 2000) (the '450 Patent). Before the Court are disputed claims for construction pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The parties have submitted proposed claim constructions, along with supporting briefs and exhibits, and a Markman hearing was held by the Court to aid in the construction of disputed claims.

I. BACKGROUND

A. The '450 Patent

U.S. Patent No. 6,092,450 covers a "rotary cutter for sheet material," a device used by major home-improvement retailers to cut rolled flooring materials, such as carpet and vinyl. The '450 Patent issued to Raymond Dueck, a Canadian citizen, on July 25, 2000. Dueck subsequently assigned the patent to Vidir Machine, Inc.

As described in the specification, the '450 Patent's operation is fairly straightforward. First, flooring material such as carpet or sheet vinyl is laid lengthwise on top of a table (referred to in the patent as a "support member") and measured to a desired length. The material is then cut from below by a disc-shaped blade, which protrudes through a slot in the table and rotates on an axis perpendicular to the slot.

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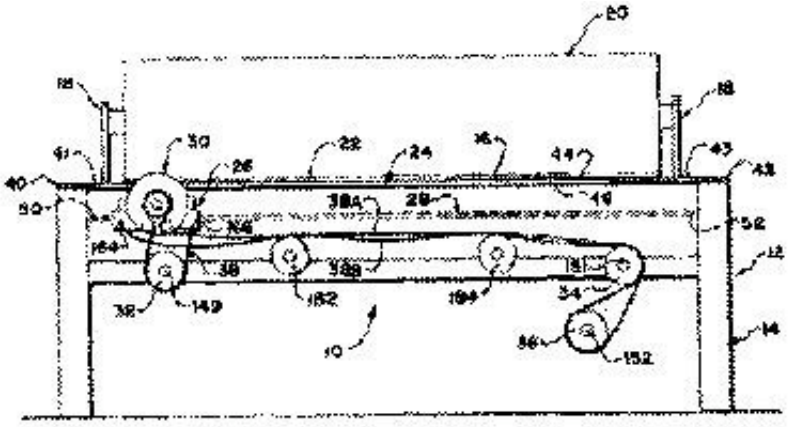


FIG. 1

Figure 1 - A front view of the first embodiment of the '450 Patent. (Note: All figures are taken from the '450 Patent).

FIG. 1

The disc-shaped blade is mounted to a "cutter block" (seen in Figure 2), which moves laterally along the slot. The cutter block is driven by a cable or chain, which is powered by a motor and guided along the length of the slot by a set of pulleys or gears. The rotation of the blade is driven by the movement of the cutter block. FN1 Finally, after the cut is made in one direction, the device can be operated to cut in the opposite direction.

FN1. As will be discussed below, the parties disagree as to whether the cable or chain that drives the cutter block must also drive the rotation of the blade.

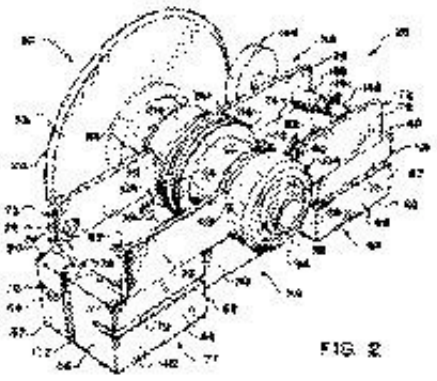


Figure 2 - The cutter block and rotary cutter assembly.

FIG. 2

Although cutting devices for sheet material were known in prior art, the invention disclosed in the '450 Patent improved on earlier cutting devices in two significant ways. First, when compared to fixed-blade (as opposed to a rotary-blade) arrangements, the rotary cutter provides a smoother cut. Second, because the invention is driven by a chain or cable, rather than by hydraulic or pneumatic mechanisms, the rotary cutter is relatively inexpensive and quiet. Additionally, the drive means can be arranged in such a manner as to stop the movement of the cutter block at the end of the slot without the use of physical stops or limiting switches, which also reduces noise and cost.

The specification of the patent describes two embodiments of the invention. Both embodiments describe several major structural elements. The first embodiment (seen in Figure 1, supra) describes a driving mechanism using a cable attached to the cutter block, several pulleys, and a motor to drive the cable. The second embodiment (seen in Figure 3) describes a driving mechanism using a chain attached to the cutter, several sprockets, and a "slip clutch" to control the position of the cutter block without stopping the motor.

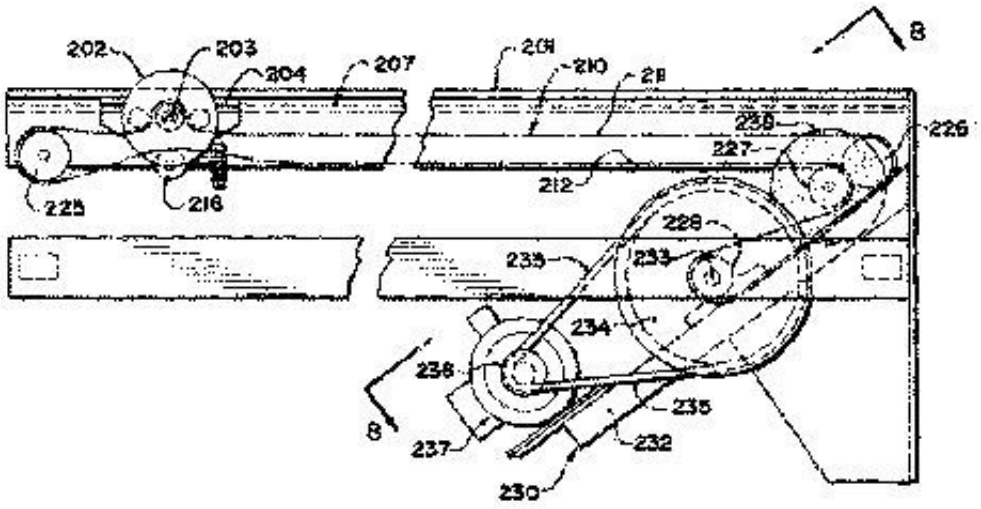


FIG. 7

Figure 3 - The second embodiment of the invention (as seen in Figure 7 of the patent).

FIG. 7

The two embodiments share many of the same characteristics. For example, both embodiments disclose methods of stopping the cutter block utilizing tension in the cable or chain, without the need for physical stops or limit switches. Furthermore, both embodiments describe particular arrangements of the several pulleys or sprockets to achieve bi-directional movement of the cutter block. Indeed, the primary differences between two embodiments arise out of differences in the driving member (the cable or chain) utilized in each.

The '450 Patent also includes 16 claims. Four of the claims-1, 9, 11, and 13-are independent claims. FN2 Each claim in the patent shares certain limitations: "a support member"; "a slot"; "a cutter block"; and "a rotary cutter." With the exception of claims 9 and 10, the claims also share, *inter alia,* the following limitations: "an elongate flexible drive member"; two "rotatable guide member[s]"; and "a rotary drive actuator." As discussed below, the proper construction of virtually all of these limitations are in dispute.

FN2. Claims 2-8 are dependent on claim 1, claim 10 is dependent on claim 9, claim 12 is dependent on claim 11, and claims 14-16 are dependent on claim 13.

B. Procedural Background

Although the procedural background of this case is fairly involved, the background for this order is relatively simple. On October 27, 2004, the Court ordered that a hearing be held to aid in its construction of the claims in dispute in this case. (Doc. No. 34.) Upon resolution of several discovery-related issues, the parties submitted proposed claim-construction language and briefs supporting their proposed constructions.

After ruling on several pre-hearing motions, the Court held the hearing on May 24, 2005. While a decision was pending, the parties requested a stay, which the Court granted. On May 26, 2006, Plaintiffs filed an amended complaint adding United Fixtures Company, Inc., as a new defendant. At the parties' request, the Court allowed further briefing on the issue of claim construction by new Defendant United Fixtures Company, Inc., and permitted opposition and reply briefs. After this latest round of briefing, the issue of claim construction is ready for adjudication.

II. STANDARD OF REVIEW

[1] [2] [3] A patentee's invention is defined by the patent's claims. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc). Thus, when a court is called upon to give meaning to the scope of the invention, the "analysis must begin and remain centered on the claim language itself." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed.Cir.2004) (internal quotation marks and brackets omitted). This analysis requires the Court to discern the "ordinary and customary meaning of a claim term," Phillips, 415 F.3d at 1313, which, in turn, "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention," id.

[4] [5] [6] Generally, a person of ordinary skill in the art would not understand the ordinary and customary meaning of a claim term in isolation. Instead, such a person is "deemed to read the claim term ... in the context of the entire patent, including the specification." Id. Further, where ambiguity in the meaning of the term exists, the "most significant source" of authority is "the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Intrinsic evidence of the ordinary and customary meaning may also include prior art identified by the patentee at the effective filing date of the patent application. V-Formation, Inc. v. Benetton Group SpA, 401 F.3d 1307, 1310-11 (Fed.Cir.2005).

[7] [8] In certain circumstances, a patentee may "act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning." Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc., 467 F.3d 1370, 1376 (Fed.Cir.2006) (quoting Chef Am., Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1374 (Fed.Cir.2004)). However, when "determining whether a statement by a patentee was intended to be lexicographic, it is important to determine whether the statement was designed to define the claim term or to describe a preferred embodiment." E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369 (Fed.Cir.2003). If the intrinsic evidence does not suggest that the patentee intended a meaning other than the ordinary and customary meaning of a term, the court should not deviate from that meaning.

[9] Finally, the court may consider extrinsic evidence, "which consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises," Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed.Cir.1995), though such evidence is typically "less reliable than the patent and its prosecution history in determining how to read claim terms," FN3 Phillips, 415 F.3d at 1318.

FN3. In the much-anticipated Phillips decision, the Federal Circuit identified a number of reasons for courts to view extrinsic evidence with a critical eye: (1) extrinsic evidence is inherently unreliable for the meaning of a claim's terms because it is not "part of the patent"; (2) extrinsic evidence may be misleading because the evidence is often intended to be consumed by lay readers, rather than skilled artisans, "and therefore may not reflect the understanding of a skilled artisan in the field of the patent"; (3) the introduction of certain extrinsic evidence is inherently biased due to the posture of litigation; (4) the parties can pick and choose

extrinsic evidence from the "virtually unbounded universe of potential extrinsic evidence of some marginal relevance that could be brought to bear on any claim construction question"; and (5) the "public notice function of patents" is potentially undermined by incorporating limitations from outside the patent's scope. Phillips, 415 F.3d at 1318.

III. DISCUSSION

In this case, the parties have called on the Court to interpret the meaning of several terms, and have proffered their proposed constructions of the terms. The Court will address each in turn.

A. "Elongate Flexible Drive Member" and "Elongate Member"

[10] [11] The first terms requiring construction are "elongate flexible drive member" (which will sometimes be referred to as "EFDM") and "elongate member." As a starting point, the parties generally agree that an EFDM is "a flexible structure having a length greater than its width." The parties also agree that the EFDM pulls the "cutter block." At issue, however, is whether the term "elongate member" is a shorthand term for "elongate flexible drive member" or whether an "elongate member" can be independent from the EFDM in claims 11 and 12. For purposes of the following discussion, UF's approach will occasionally be described as a "single-structure" approach, which contemplates that the elongate member must be the same structure as the EFDM, while Vidir's will be considered "structure-neutral," which contemplates that the elongate member could be (but need not be) the same structure as the EFDM.

Neither term is defined in the specification and the claims add little to the terms' meanings. Further complicating the construction of these terms is the fact that the specification and prosecution history arguably point in both directions. Nevertheless, for the reasons below, the Court concludes that "elongate member" is not a shorthand for "elongate flexible drive member" in the '450 Patent, and adopts Vidir's structure-neutral approach to the term.

The term "elongate member" is found six times in the '450 Patent: twice in claims 11 and 15, and once in claims 12 and 16. Vidir concedes that, because of the use of the definite article "the" in claims 15 and 16, the "elongate member" of claims 15 and 16 refers to the EFDM identified in independent claim 13. Vidir argues, however, that in claim 11, the "elongate member" is distinct from the EFDM because it is preceded by the indefinite article "an," indicating that *two* elongate members are described in the claim. The use of the definite article in claim 15 and the indefinite article in claim 11 does suggest that the relationship between "elongate member" and EFDM may differ in claims 11 and 15. But to resolve the ambiguity, the Court will turn to the intrinsic evidence to discern the meaning. KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed.Cir.2000) ("when claim language or context suggests an ambiguity in application of the general meaning of an article, this court undertakes an examination of the written description and the prosecution history to ascertain whether to limit the meaning of 'a' or 'an.' ").

Although a lengthy review of the prosecution history is necessary in this case, the Court will pause to note that the prosecution history supports Vidir's structure-neutral approach. As described below, the inclusion of "an elongate member" in claims 11 and 12 was intended to overcome prior art, and the prosecution history suggests that Vidir explicitly contemplated that the "elongate member" *could* be (but does not need to be) distinct from the EFDM.

Claims 11 and 12 in the '450 Patent owe their origins to claims 19-24 of the patent application, which were

added to the patent application on July 20, 1999. As initially presented, claim 19 described an EFDM and a separate "drive member mounted on the shaft for driving the shaft, the drive member being driven by and receiving motive force from said movement of the cutter block." (P.H. 281-82.) Claim 20 added the limitation that "the drive member rolls along an elongate member extending along the length of the slot." (P.H. 282.) Claim 21 added the limitation that "the elongate member comprises a portion of the elongate flexible drive member." (P.H. 282.) Claim 22 added the limitation that "the portion of the elongate flexible drive member is connected to the elongate flexible drive member driving the cutting block." (P.H. 282.) Vidir argues that claims 20-22 clearly suggest that the patentee contemplated a separate elongate member that "comprises a portion" of the EFDM.FN4

FN4. Claims 23 and 24 are not relevant to the construction of the term in dispute.

In an office action dated September 24, 1999, the patent examiner rejected claims 19-24 on the grounds that the claims were obvious in light of prior art. Specifically, the patent examiner found that the combination of Bennett et al., No. 4,779,500 ("the Bennett patent") and Kitai et al., No. 4,383,458 ("the Kitai patent") made claims 19-24 unpatentable. According to the office action, the patent examiner found that the Bennett patent, which disclosed an "apparatus for cutting sheet material," taught "everything except the cutting disk drive member being driven by the movement of the cutting block." (P.H. 290.) In the Kitai patent, which disclosed "a film cutter for cutting a strip of film fed out to a cutting area," the cutting apparatus utilized the movement of the cutting block to drive the cutting disk. Thus, the patent examiner determined that "[i]t would have been obvious to one of ordinary skill to have provided Bennett et al with the cutter drive of Kitai et al, to make a lighter, less costly cutting device." (P.H. 290.)

On December 29, 1999, Vidir submitted a response to the patent examiner's findings that claims 19-24 were unpatentable under 35 U.S.C. s. 103. In the response, Vidir cancelled claims 20, 22, 23 and 24, and amended claims 19 and 21, which ultimately became claims 11 and 12 in the '450 Patent. Vidir amended FN5 claim 19 as follows:

FN5. When amending claims, 37 C.F.R. s. 1.121(c) provides, in relevant part, that: "[t]he text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters."

a drive [member] *sprocket* mounted on the shaft for driving the shaft, the drive [member] *sprocket* being *arranged to roll along an elongate member extending along the length of the slot and having a plurality of abutment shoulders thereon at spaced positions therealong so that teeth of the sprocket are positively* driven by *the elongate member* and *so that the cutting blade receives* [receiving] motive force from said movement of the cutter block.
(P.H. 300.) As described in the response to the office action, by amending claim 19, Vidir intended to clarify that "the drive to the shaft of the cutting blade is driven by the positive action of a sprocket rolling along an elongate member having abutment shoulders so as to provide positive driving action against the sprocket." (P.H. 308.) Significantly, claim 19 was amended to exclude the use of "simple frictional engagement" as a means of rotating the cutter, and accordingly limited the claim to the use of "an elongate member ... to provide positive driving action against the sprocket." (*Id.*) This difference, according to Vidir, was sufficient to overcome the obviousness rejection because the invention:

[H]as the advantage that there is positive drive to the knife blade to ensure that the blade continues to rotate despite significant resistance from the cutting action and despite any wear which may occur in the structure which could otherwise allow slippage to occur and prevent a proper cutting action of the blade. The combination of Kitai and Bennett therefore does not provide an arrangement as now set forth in Claim 19 wherein the drive is a *positive drive and obtains motive force from the movement of the cutting block*. (P.H. 309-10) (emphasis added). The advantage of having a driving mechanism for the rotary cutter to overcome the resistance of the sheet material is an important aspect of the disclosed invention, and it is the elongate member that translates the movement of the cutter block into positive motive force for driving the rotary cutter. The prosecution of claim 11 makes clear that the elongate member having a plurality of abutment shoulders, as opposed to simple frictional engagement, was responsible for driving the rotary cutter. Tellingly though, while the elongate member specifically required "a plurality of abutment shoulders," the EFDM did not require such a limitation. This suggests that the elongate member in claim 11 has a separate function distinct from that of the EFDM.

That the elongate member does not need to be the same structure as the EFDM finds further support in the prosecution history of claim 12. Originally, the claim had the limitation that "the elongate member comprises a portion of the elongate flexible drive member." FN6 Vidir persuasively argues that to construe the "elongate member" to be the same structure as the EFDM, would render the claim meaningless as "the elongate flexible drive member comprises a portion of the elongate flexible drive member." A single-structure approach therefore also appears to be inconsistent with the patent's prosecution history of claim 12. Accordingly, the weight of the prosecution history indicates that the elongate member in claims 11 and 12 does not need to be the same structure as the EFDM, though it could be.

FN6. The claim was amended to its current form as follows: "the elongate member comprises a portion of [the elongate flexible drive member] *a chain*." (P.H. 301.)

That the prosecution history supports Vidir's position is not the end of the matter, however, because UF raises a substantial argument that the specification dictates a contrary construction. UF argues that because the ' 450 Patent's specification only discloses embodiments with a single chain or cable, the "elongate member" must be the same structure as the EFDM because "a construction that excludes a preferred embodiment 'is rarely, if ever, correct.' " C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 865 (Fed.Cir.2004) (quoting Vitronics Corp., 90 F.3d at 1583). UF's argument fails, however, because a construction of "elongate member" as an independent structure does not necessarily *exclude* either embodiment. Although it is generally true that a construction should not exclude the disclosed embodiment, it is equally true that "a patent claim term is not limited merely because the embodiments in the specification all contain a particular feature." Id. Balancing these competing rules requires the court to consider "whether the specification refers to a limitation only as a part of less than all possible embodiments or whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment." Alloc, Inc. v. Int'l Trade Comm'n, 342 F.3d 1361, 1370 (Fed.Cir.2003). Here, the Court finds that the specification's use of a single chain or cable does not prove that the "very character of the invention" is a single structure. Indeed, Vidir's structure-neutral approach is the most appropriate construction of the claim term "elongate member" precisely because it is more consistent with the claim terms' meaning, is consistent with prosecution history, does not import any limitations from the specification, and encompasses both disclosed embodiments.

The '450 Patent's specification plainly discloses two embodiments with a single chain or cable. Nothing in

the specification, however, indicates that the invention requires a single chain or cable. The flaw in UF's argument is more readily understood when one considers the parties' proposed constructions. On one hand, UF proposes that the "elongate flexible drive member" must drive the rotary cutter in claim 11. On the other hand, Vidir's proposed construction is neutral; the "elongate flexible drive member" *could* drive the rotary cutter, but it does not have to.FN7 Thus, the neutral interpretation neither excludes the disclosed embodiments nor limits the invention to the specification. *Cf.* Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1353 n. 8 (Fed.Cir.2004) ("Our broader interpretation of the term 'headers' does not exclude the use of the headers disclosed in the preferred embodiment; it simply does not require their use.")

FN7. The elongate member could not, however, drive the cutter block. That is the sole province of the EFDM.

Giving due accord to the available intrinsic evidence, the Court concludes that Vidir's structure-neutral approach should guide the Court's construction because it is most faithful to the claim language, the prosecution history, and the patent's specification. Accordingly, the Court holds that the proper construction of "elongate flexible drive member" is as follows: "a flexible structure having a length greater than its width, such as a cable or chain, which pulls the cutter block along the length of the slot." Meanwhile, the term "elongate member" refers to "a structure having a length greater than its width, which may be used to drive the rotary cutter."

B. "Rotatable Guide Member"

[12] The next claim term in dispute is "rotatable guide member" (RGM). With the exception of claims 9 and 10, all of the claims in the '450 Patent include "a first rotatable guide member" and "a second rotatable guide member" that guide the elongate flexible drive member along the slot. Though both parties agree generally that an RGM is a pulley or a sprocket, the narrow issues in dispute are (1) whether one of the two RGMs must be a double pulley or double sprocket and (2) whether the elongate flexible drive member must be in contact with approximately 180 degrees of each RGM.

1. Whether a Rotatable Guide Member be a double pulley or double sprocket

UF advances two reasons to find that one of the RGMs must be a double pulley or double sprocket. First, UF argues that the claimed invention simply cannot work without one. Specifically, UF points to Figures 6A and 7 (shown below in Figure 4) and argues that:

In order to pull the cutter block, the two portions of the elongate flexible drive member must enter and exit the rotatable drum moving in opposite directions. A single pulley or sprocket that rotates in only one direction cannot accommodate such bi-directional movement of the elongate flexible drive member. Rather, a double pulley or double sprocket, which contains two independently-rotatable [sic] pulley or sprocket elements, is required.

(Defs' Opening Claim Construction Br. 21.) Vidir disagrees.

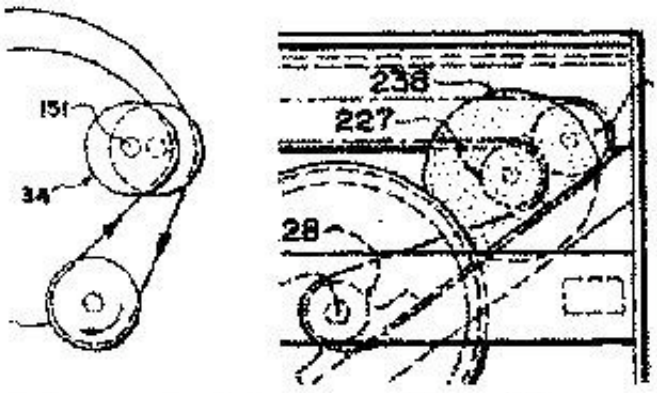


Figure 4 - Selections from Figures 6A and 7 of the '450 Patent.

At the hearing before this Court, the patentee explained that the claimed invention could work without double pulleys or double sprockets by using an alternative configuration: "If we had the motor directly attached to the pulley on the left-hand side, for instance, then we would only need the one pulley at the other end." (Tr. 27.) Mr. Dueck explained that although the preferred embodiments both require double pulley and double sprocket elements this is so only because of the motor's location in the preferred embodiment. Were the motor located differently, a double pulley or double sprocket would not be required.

Second, UF argues that the '450 patent's claims should be construed to require one RGM to be a double pulley or double sprocket in light of the fact that the specification does not teach any alternative. Vidir counters that a uniform construction of the term "rotatable guide member" is preferable to construing one RGM to be different from the other.

[13] Both parties' arguments are well taken. As a starting point, the Court notes that "it is improper to read limitations from a preferred embodiment described in the specification-even if it is the only embodiment-into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 913 (Fed.Cir.2004). In this case, UF is correct that the only embodiments of the claimed invention show double pulley or double sprocket elements. Whether a double pulley or sprocket is actually necessary is disputed, and the specification seems to contemplate any interpretation of "rotatable guide member" as either a single or double pulley or sprocket. As a matter of consistent interpretation of the claim term "rotatable guide member," the most proper construction would encompass single and double pulleys and sprockets. Such a construction best comports with the meaning given by the specification and does not import limitations from the specification into the claim. Accordingly, the Court holds that the proper construction of "rotatable guide member" is "a pulley or sprocket, either in single or double form."

2. The meaning of "wrapped there around"

[14] Independent claims 1, 11, and 13 require that each of the rotatable guide members have the EFDM "wrapped there around" FN8 to guide the movement of the EFDM as the RGMs rotate. The parties dispute whether the phrase "wrapped there around" means that the EFDM must contact "approximately 180 degrees" of the RGM. In support of its position that the EFDM must engage about half of the RGM, UF argues that the patent's figures and specification clearly contemplate such a configuration.

FN8. In claim 11, the EFDM is "wrapped therearound."

The Court disagrees. At the outset, the Court notes that the '450 Patent's usage of the term "wrapped" in the patent's claims seems to encompass several other terms found in the patent's specification, such as "extending," and "passing." col.5, ll.3-12; col.7, ll.11-15; col.8, ll.63, 66-67; col.9, l.1-17. Furthermore, even if the patent's figures could be relied on to show the contact angle, which they cannot, *see* Hockerson-Halberstadt Inc. v. Avia Group Int'l Inc., 222 F.3d 951, 956 (Fed.Cir.2000), the figures do not clearly show that the EFDM must engage at least approximately half of the RGM (*see* Fig. 6A, at 34, 110 & 112, as shown in Fig. 5, *infra*) Nevertheless, the meaning can be discerned when evaluated in the context of the claim term. Specifically, in the claims, the phrase "wrapped there around" is modified insofar as the EFDM must be configured "so that the guide members, as they rotate, guide movement" of the EFDM. col.13, ll.36-38. Thus, the claim limitation necessarily requires that the contact between the EFDM and the RGM be more than de minimis; the RGM must "guide" the EFDM. Indeed, both parties agree that the EFDM must have more than minimal contact with the RGM. Neither the specification, figures, nor claim terms explicitly require any amount of engagement, let alone UF's proposed construction of approximately 180 degrees. By contrast, Vidir's proposed construction-that the guide members "direct the path of the [EFDM]"-stays most true to the claims and the specification. Thus, Vidir's proposed construction will be adopted.

C. "Rotary Drive Actuator"

[15] [16] The next claim term requiring construction is "rotary drive actuator." Independent claims 1, 11, and 13 all include the limitation of "a rotary drive actuator for driving the [EFDM] along its length" in first and second directions so as to move the cutter block. In the patent's specification, the structure responsible for driving the EFDM is identified as a "driven rotatable drum" in the first embodiment and as a "main drive motor" in the second embodiment. Both parties agree that these structures describe the "rotary drive actuator." Furthermore, both parties generally agree that the claim term can be understood to mean "a motor-driven rotatable drum, pulley, or sprocket, which, as it rotates, moves the elongate flexible drive member in one of two directions." The parties' disagreement is narrowly focused on claim 13, and whether the rotary drive actuator must also stop the EFDM. Claim 13 includes the following limitation:

[A] rotary drive actuator for driving the elongate flexible drive member along its length in a first direction, such that the first run causes said movement of the cutter block in a first direction along the slot to a first endmost position of the cutter block adjacent the first end of the slot, and for driving the elongate flexible drive member along its length in a second direction such that the first run causes said movement of the cutter block in a second direction along the slot to a second endmost position of the cutter block adjacent the second end of the slot.

col. 14, ll.7-19. UF argues that in claim 13, the rotary drive actuator must move *and* stop the cutter block at the "endmost" positions by utilizing tension in the EFDM rather than through the use of physical stops or limit switches. Vidir argues that the patent's claims are silent as to the stopping mechanism, and that UF's construction improperly imports a limitation from the specification into the claim. Vidir's argument is misplaced, however, because the means of stopping the cutting block is not simply a feature of the preferred embodiments, it is a part of the disclosed invention. The background of the invention, the specification, and the prosecution history all support a construction of claim 13 where the drive means must also stop the cutter block's movement.

One of the unique features of the '450 Patent is its tension-based drive mechanism (which can be seen in Figure 5, infra). For example, the background of the invention states that "[v]arious means may be utilized to propelled [sic] the knife blade which may include a chain drive mechanism or an air or hydraulic cylinder mechanism. In these devices the cutter is often stopped when it reaches either of the ends of the slot by contacting a stop which prevents further movement along the slot.... These systems also tend to be excessively noisy. This is caused in part by the impact of the cutter on the stop." col. 1, ll.41-52. Furthermore, in the specification, both embodiments utilize a tension-based stopping mechanism, which is described as "eliminat [ing] the need for a stop and therefore eliminat[ing] any noise that would be caused by collisions between the cutter block and the stop," col.5, ll.60-62, and as controlling the position of the block "automatically without the necessity for limit switches or physical stops which would impact the block with excessive jarring action," col.9, l.67-col.10, l.1-2. Importantly, the specification stated that "[t]he [cutter] block is automatically stopped by the tensioning of the chain of the chain [sic] and the motor can continue to run without damage to the system." Thus, both the background of the invention and the specification disclose an invention without stops and limit switches.

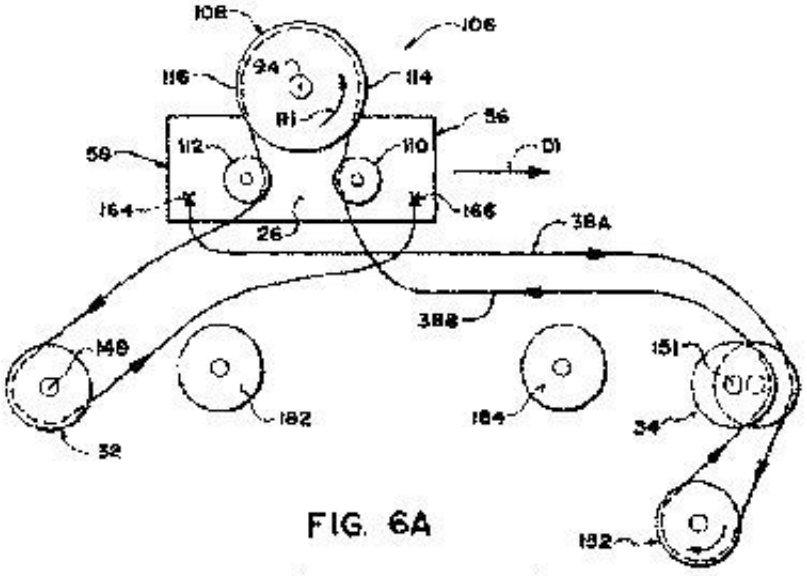


FIG. 6A

Figure 5 - The tension-based drive mechanism (as seen in Figure 6A of the patent).

FIG. 6A

Furthermore, in the prosecution history of claim 13, Vidir expressly disclaimed that its invention utilized limit switches or stops to halt the movement of the cutter block. Specifically, Vidir distinguished the drive mechanism from that in the Bennett patent, described above, as follows:

[I]t is pointed out that the drive belt of Bennett ... is clearly rigidly attached to the cutter block so that its position is wholly controlled by the movement of the belt. *More particularly the movement of the cutter in Bennett is controlled by limit switches or by the setting on dials which control the motor and therefore the*

belt.

(P.H. 304) (emphasis added).FN9 Vidir thus expressly distinguished the claimed invention from the prior art by highlighting the innovation of the tension-based drive mechanism, consistent with the patent's description. Accordingly, the patent's intrinsic evidence supports the conclusion that the drive mechanism described in claim 13 is responsible for controlling the movement of the cutter block in both directions and stopping it.

FN9. The Court notes that the quoted section came in the context of discussing original claim 1, which was initially rejected as anticipated by prior art. However, in the same office action, Dueck submitted new proposed claim 25, which became claim 13, as a "combination of original claim 1 with the features of original Claims 3 and 6." (P.H. 305.) The drive mechanism in claim 13 is roughly identical to that of claim 1, though claim 13 includes a first and second run of the EFDM. Thus, the Court will treat the disclaimer in claim 1 as applicable to claim 13.

Therefore, the Court will construe claim 13 to include the limitation that "the rotary drive actuator stops the cutter block at its first and second endmost positions without the use of a stopping block or limit switch."

D. "A connector"

[17] The next claim limitation in dispute also appears in claim 13: "a connector connecting the first run [of the EFDM] to the cutter block for driving movement of the cutter block." col. 14, l.5-6. Vidir argues that the ordinary meaning of a "connector" is well known in the relevant art as a linkage between the EFDM and the cutter block. UF argues that the '450 Patent's disclosure is limited to the connecting element described in the specification, and therefore that "connector" should be narrowly construed.

As discussed above, it is a principal tenet of claim construction that the claims-not the specification-define the patented invention. Phillips, 415 F.3d at 1312. The claim states that the "connector" links the EFDM to the cutter block. Because the ordinary meaning of "connector" is readily discernable as a linking structure, reference to the specification is unnecessary. That the specification identifies a connecting element in the preferred embodiment should not limit the ordinary meaning of the claim language. Thus, Vidir's construction of the claim limitation will be adopted: "a structure that links or secures the elongate flexible drive member to the cutter block so that movement of the elongate flexible drive member will move the cutting block."

E. "The support member defining a slot"

[18] One limitation of the patent's claims is that the rotary cutter blade protrudes through an opening in the cutting table. Accordingly, each claim includes a "support member for receiving the sheet material from the supply [of sheet material]," and provides that "the support member defin[es] a slot having a first end adjacent the first side of the support member and a second end adjacent the second side of the support member and extending therebetween." The slot, both parties agree, is an opening with a length greater than its width. But UF argues that because the slot is *defined* by the support member, the slot must be contained within the support member on four sides. Vidir argues that UF's proposed construction "is an effort to limit the claim to the embodiment" in the specification. (Pls' Opening Claim Construction Br. 18.) However, the inclusion of the term "defined" is of critical importance to the interpretation of the limitation. A construction that the "slot" be contained within the support member does not import a limitation from the specification;

rather, such a construction gives meaning to the limitation's use of the term "define." Furthermore, because the invention plainly contemplates that the rotary cutter must lie below the support member and extend through the slot, it is consistent with the specification and claim language that the slot opening lies entirely within the support member. Accordingly, UF's construction will be adopted as to the meaning of the "slot."

F. Remaining claims

[19] Finally, UF argues that the terms "support wall" and "abutment shoulders" are ambiguous and not sufficiently described in the patent disclosure to allow a person skilled in the relevant art to understand their meaning. The Court disagrees. With respect to the term "support wall," the Court notes that the term "support wall" refers to the "support surface" that is sufficiently disclosed in the patent.FN10 With respect to the term "abutment shoulders," Vidir points out that "sprockets" and "shoulders" are well known in the relevant art with regard to mechanical-drive systems, and that the patent's disclosure with regard to "abutment shoulders" is sufficient to provide meaning to the term. "Abutment shoulders" would be well understood by a person skilled in the relevant art as the parts of a chain that engage the teeth of a sprocket. Furthermore, as discussed above, the prosecution history of the ' 450 patent suggests that the inclusion of the "elongate member having a plurality of abutment shoulders" was intended to exclude "frictional engagement" as a means of driving the rotary cutter, which is consistent with the ordinary meaning of the term. The Court will therefore construe the term "abutment shoulders" in accordance with its ordinary meaning: "portions of the elongate member that engage the teeth of the drive sprocket."

FN10. The relevant inquiry is whether "support wall" is sufficiently described to enable a person skilled in the relevant art to use the claimed invention. Although the claim's usage of the term "support wall" belies somewhat careless drafting in the prosecution of the patent, it does not create ambiguity in the meaning of the patent's claims nor demonstrate that a person skilled in the art would be unable to discern its readily understood meaning within the context of the patent.

III. CONCLUSION

Accordingly, the Court will adopt, in part, the parties' proposed claim constructions consistent with this opinion. An appropriate order follows.

ORDER

AND NOW, on this 21st day of July, 2008, for the reasons set forth in the accompanying memorandum, **IT IS HEREBY ORDERED THAT** the disputed claim terms shall be construed as follows:

1. "Elongate flexible drive member" is construed to mean "a flexible structure having a length greater than its width, such as a cable or chain, which pulls the cutter block along the length of the slot."

2. "Elongate member" is construed to mean "a structure having a length greater than its width, which may be used to drive the rotary cutter."

3. "Rotatable Guide Member" is construed to mean "a pulley or sprocket, either in single or double form."

4. "Wrapped there around" is construed to mean "in sufficient contact as to permit the rotatable guide member to direct the path of the elongate flexible drive member."

5. "Rotary drive actuator" is construed to mean "a motor-driven rotatable drum, pulley, or sprocket, which, as it rotates, moves the elongate flexible drive member in one of two directions."

6. In claim 13, the limitation beginning with "a rotary drive actuator for driving the elongate flexible drive member ..." is construed to include the following limitation: "the rotary drive actuator stops the cutter block at its first and second endmost positions without the use of a stopping block or limit switch."

7. In claim 13, the term "a connector" is construed to mean "a structure that links or secures the elongate flexible drive member to the cutter block so that the movement of the elongate flexible drive member will move the cutting block."

8. "The support member defining a slot" is construed to mean "a surface that supports the sheet material for cutting. There is an opening formed in, and surrounded on all sides by, the surface. The length of the opening is greater than its width."

9. "Abutment shoulders" is construed to mean "portions of the elongate member that engage the teeth of the drive sprocket."

IT IS FURTHER ORDERED THAT Vidir's motion to file a surreply brief (Doc. No. 175) is **DENIED** as moot.

M.D.Pa.,2008.
Vidir Machine Inc. v. United Fixtures Co.

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