United States District Court,
D. Nebraska.

The TORO COMPANY, a Delaware corporation, and Exmark Mfg. Co., a Nebraska corporation,
Plaintiffs.
v.
SCAG POWER EQUIPMENT, INC., a Wisconsin corporation, and Metalcraft of Mayville, Inc., a Wisconsin corporation,
Defendants.

No. 8:01CV279

Aug. 5, 2002.

MEMORANDUM AND ORDER

JOSEPH F. BATAILLON**, District Judge.**

Before the court is the defendants' request, Filing No. 38, pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), for construction of the patent claims at issue in this infringement action. The court held a hearing on the defendants' motion on January 31, 2002.

Background

A. *The Parties and the Patents*. Exmark is a wholly owned subsidiary of Toro; it is located in Beatrice. Scag is a division of Metalcraft of Mayville; together, they manufacture and sell riding and walk-behind mowers under the name "Advantage." The plaintiffs (hereafter, collectively, "Toro") allege that these mowers infringe Toro's Patent No. 5,133,176 (" '176") and Exmark's Patent Nos. 5,845,475 (" '475") and 5,987,863 (" '863") FN1. Scag also manufactures and sells hydro-drive walk-behind mowers which allegedly infringe Exmark's Patent No. 5,822,961 (" '961").

FN1. Patent No. '863 is a continuation of Patent No. '475.

The Patent and Trademark Office (PTO) granted the '176 patent to Toro in July 1992 on its improved multi-bladed mulching mower. The PTO granted the '475 and '863 patents to Exmark in August 1998 and November 1999, respectively, on the improved flow control baffles and mulching baffles on its mowers. The PTO granted the '961 patent to Exmark in October 1998 on its means for adjusting the output of hydraulic pumps that allow the mower to track in a straight line.

B. *The Alleged Infringements*. Toro alleges that the Scag hydro-drive mower and the Advantage mower decks include all the elements of claims 1 and 2 of the ' 475 patent and include all the elements of claims 1, 2, 3, 6, 7, and 8 of the '863 patent. The mowers therefore allegedly literally infringe these two patents.

Toro also alleges that because the Scag hydro-drive walk behind mower includes all the elements of claims 5, 6, and 7 of the '961 patent, it literally infringes the patent.

Finally, Toro alleges that the Advantage cutting decks literally infringe claims 1, 2, 5, 14, 15, 18, 19, and 20 of the '176 patent.

Legal Standard

In a *Markman* hearing, the court interprets the terms of a patent, including terms of art within the patent claims. The construction of the terms in a patent is a matter of law reserved entirely for the court. Markman v. Westview Instruments, Inc., 517 U.S. at 372. The court's interpretation of terms controls in subsequent determinations concerning a patent's infringement or invalidity.

To interpret a claim, the court begins with "intrinsic evidence," *i.e.,* the patent itself (including the specification,FN2 *i.e.,* all the text and figures preceding the numbered patent claims FN3) and the prosecution history, if it is in evidence. Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331-32 (Fed.Cir.2000). The language of the claims is given its ordinary meaning as understood by one skilled in the art. Hockerson Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951, 955 (Fed.Cir.2000). This ordinary meaning controls unless the patentee clearly defines a word differently in the specification or the prosecution history. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). If after this analysis a claim limitation remains unclear, the court then looks to extrinsic evidence, such as dictionaries, technical articles, expert testimony, or the inventor's testimony. Dow Chem. Co. v. Sumitomo Chem. Co., 257 F.3d 1364, 1372-73 (Fed.Cir.2001). Claim language should generally be construed to preserve validity, if possible. Tate Access Floors, Inc. v. Interface Architectural Res., Inc., 279 F.3d 1357, 1365 (Fed.Cir.2002).

FN2. The specification in a patent document describes the invention and "the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art ... to make and use the same." 35 U.S.C. s. 112, para. 1; Markman v. Westview Instruments, Inc., 517 U.S. at 373.

FN3. In a patent document, " '[a] claim covers and secures a process, a machine, a manufacture, a composition of matter, or a design, but never the function or result of either, nor the scientific explanation of their operation.' " Markman v. Westview Instruments, Inc. 517 U.S. at 373 (quoting 6 E. Lipscomb, Walker on Patents s. 21:17, at 315-16, (3d ed.1985)). By defining the scope of the patent, the claim "functions to forbid not only exact copies of an invention, but products that go to 'the heart of an invention but avoid the literal language of the claim by making a noncritical change.' " Id. at 373-74 (quoting H. Schwartz, Patent Law and Practice 82 (2d ed.1982)).

The presumption in favor of the ordinary meaning of claim language as understood by one of ordinary skill in the art is rebutted only 1) where the patentee has clearly and explicitly defined the claim term, or 2) where "the claim term would render the claim devoid of clarity such that there is 'no means by which the scope of the claim may be ascertained from the language used." Id., 279 F.3d at 1370 (quoting Bell Atl. Network Servs., Inc. v. Covad Communications Group, Inc., 262 F.3d 1258, 1268 (Fed.Cir.2001)).

Discussion

Only three of the four patents at issue in this case require claim interpretation.

A. The '961 Patent. The '961 patent presents multiple claim interpretation issues.

1. " *Infinitely Adjustable* " (claims 5 and 7).

Claim 5 states that the "connection means ha[s] adjustment means thereon for infinitely adjusting the tracking of the mower by adjusting the output" of one of the hydraulic pumps, all without stopping the mower. Filing No. 61, Defendants' Index of Evid., Ex. D, '961 Patent, col. 7, lines 1-5 (hereafter, '961 Patent). Claim 7 states that the "connection means include [s] adjustment means for infinitely adjusting the tracking of the mower by adjusting the output" of one of the hydraulic pumps. Id., col. 8, lines 27-30.

Toro argues that this "infinitely adjustable" language creates a means-plus-function element under 35 U.S.C. s. 112, para. 6. When an element in a claim is "expressed as a means or step for performing a specified function" without reciting supporting structure, material, or acts, then the element "cover[s] the corresponding structure, material, or acts described in the specification and the equivalents thereof." 35 U.S.C. s. 112, para. 6. Use of the term "means" in a claim creates a presumption that the means-plus-function limitation applies. *Al-* Site Corp. v. VSI Intern., Inc., 174 F.3d 1308, 1318 (Fed.Cir.1999). The presumption is overcome, however, "if the claim itself recites sufficient structure or material for performing the claimed function ." *Id*.

Toro maintains that the corresponding structure that performs the function of "infinitely adjusting" the mower's tracking is detailed in the patent's specification, which states:

Adjustment knob 120 is threadably mounted on the upper end of control rod 94.... Although it is preferable that an adjustment knob 120 be utilized, adjustment knob 120 could be replaced by other suitable means which would permit the length adjustment of the control rod 92, with respect to arm 56, without the use of tools.

'961 Patent, col. 3, lines 56-58, 60-64. Toro says that the adjustment means is therefore defined as a knob or other device that can be manually adjusted without tools during mowing. The term " 'infinitely adjusting' relates to the movement of the adjustment mechanism between two limits.... [T]he adjustment knob can be stopped at any position between the stop limits set in the specific example of the preferred embodiment by swivel 114, nut 104 and compression spring 108." Plaintiffs' *Markman* Brief at 14-15. Accordingly, Toro states, "infinitely adjustable" should be defined as "full movement in clockwise and counterclockwise directions of an adjustment member that can be readily adjusted manually." *Id*. at 15.

Scag contends, however, that for a means-plus-function limitation to apply, a claim element must contain a definite, specific structure that will perform the function-not merely state that the patent will cover *any* structure that might perform the function. The statement in the specification that the adjustment knob could be replaced by "other suitable means," none of which are defined or even described in the specification, would, according to Scag, preclude application of the means-plus-function limitation.FN4

FN4. Scag contends, moreover, that the "other suitable means" language of the claim would encompass the adjustment means on Exmark's prior art. According to Scag, the only difference between the adjustment means on the two mowers is the replacement of a jamb nut on the earlier mower with patent '961's

"adjustment knob threadably mounted on the upper end of the control rod." Given the interchangeability of the adjustment means mechanism, Scag believes the proper interpretation of the claim term "infinitely adjustable" would allow adjustments "at any location along the threaded portion of the control rods of the invention," Defendants' *Markman* Brief at 11, whether by the jamb nuts, the adjustment knob, or some "other suitable means." Thus, Scag maintains, the prior art adjustment means must also have been infinitely adjustable.

Toro disputes that the jamb nuts of the prior art fall within the adjustment means elements of claims 5 and 7. Since jamb nuts are not described in the specification, Toro contends the jamb nuts cannot be corresponding structures covered under section 112, para. 6. Moreover, since jamb nuts cannot be adjusted without tools, they cannot be equivalents of the adjustment means described in claims 5 and 7.

I find that this dispute is outside the confines of a *Markman* hearing and need not be resolved at this time. Determining whether the claim term "infinitely adjustable" includes prior art would require the court to reach the ultimate issues of the patent's validity or infringement. Like other issues discussed below, this dispute can be better resolved in motions for summary judgment or at trial.
The court concludes that Scag's position is correct. The specification does not limit the adjustment mechanism on the mower to an "adjustment knob," but instead concedes that the function of the adjustment knob could be accomplished "by other suitable means." Since those other suitable means could conceivably take a number of forms, the means-plus-function limitation of s. 112, para. 6 cannot apply. Accordingly, the court finds that the term "infinitely adjustable" means that the tracking adjustment can be made at any location along the threaded portion of the control rods of the invention with full movement in clockwise and counterclockwise directions of an adjustment member. FN5

FN5. This definition pointedly does not address whether the adjustment is to be made manually, without the aid of tools, or while the mower is in motion.

2. *Location of the Adjustment Means* (claims 5 and 7).

The language at issue in claim 5 states: "said connection means having adjustment means thereon for infinitely adjusting the tracking of the mower by adjusting the output of one of said right and left hydraulic pumps." '961 Patent, col. 7, lines 1-4 (emphasis added). The language at issue in claim 7 states: "said connection means including adjustment means thereon for infinitely adjusting the tracking of the mower by adjusting the output of at least one of said right and left hydraulic pumps." '961 Patent, col. 8, lines 27-30 (emphasis added).

Toro maintains that while claim 5 does state that the connection means has the adjustment means "on" it, claim 7 states instead that the connection means "includes" the adjustment means. Toro says that the term "including" is not synonymous with the phrase "having thereon"-the language in claim 5 which describes the relationship of the adjustment means to the connection means. Toro contends that the adjustment means could be physically attached to the connection means in any number of ways without being actually located *on* the connection means. Claim 5 is thus intended to represent a narrower limitation than claim 7, since "[t]o be 'located on' is a narrower relationship than 'including,' meaning 'being a part of.' " Toro's Brief at 4. Toro contends that when claims use different language, the doctrine of claim differentiation provides that a difference in meaning is intended. *See* Karlin Tech., Inc. v. Surgical Dynamics, Inc., 177 F.3d 968, 971-972

(Fed .Cir.1999).

Scag, however, maintains that the language of the claims and the prosecution history of the '961 patent require me to find that the adjustment means must be literally "on" the connection means. Scag argues that the broad claims Exmark originally submitted to the PTO did not state that the adjustment means was to be located on the connection means. Exmark amended those original broad claims, however, when the PTO found they were anticipated by a Scag patent, U.S. Patent 4,967,543. Exmark therefore subsequently amended claim 5 to state the limitation that the "connection means having adjustment means thereon" and claim 7 to state the limitation that the "connection means including adjustment means." Exmark told the PTO that claim 5 "specifically describes that the connection means includes adjustment means," and that Scag's patent did not have a connection means that included an adjustment means. Exmark further told the PTO that claim 7 was "generally similar" to claim 5 and should be allowed for the same reasons as claim 5. Scag claims that these statements to the PTO estop Toro from contending that claim 5 somehow differs from claim 7.

The United States Supreme Court recently considered how patent claim amendments affect an alleged infringer's defense of prosecution history estoppel. The Court observed that if a patentee decides to amend a claim rejected by the PTO rather than appeal the rejection, the amended claim "is taken as a concession that the invention as patented does not reach as far as the original claim." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 122 S.Ct. 1831, 1838 (2002). Prosecution history estoppel arises if the claim is amended "to secure a patent and the amendment narrows the patent's scope.... A patentee who narrows a claim as a condition for obtaining a patent disavows his claim to the broader subject matter, whether the amendment was made to avoid the prior art or to comply with s. 112." *Id*. at 1840. The patentee must prove both that the claim was not amended "for a reason that would give rise to estoppel" and that "the amendment does not surrender the particular equivalent in question." *Id*. at 1842 (citing Warner Jenkinson v. Hilton Davis Chem. Co., 520 U.S. 17, 33 (1997)).

The prosecution history here clearly indicates that Toro is estopped from asserting claims 5 and 7 have different meanings with regard to the location of the adjustment means. When the PTO rejected Exmark's broad claims that had not required the adjustment means to be physically located on the connection means, Exmark decided to limit the claims by situating the adjustment means on the connection means. Because Exmark's amendment narrowed the scope of the patent, Exmark cannot claim protection for the subject matter it surrendered in that amendment. I therefore find that claims 5 and 7 should be interpreted to mean the same thing: since the connection means includes the adjustment means, the adjustment means is physically located on the connection means.

3. *Connection Means as Means-Plus-Function Format* (claims 5 and 7)

The issue here is whether the term "connection means" is a means-plus-function limitation under 35 U.S.C. s. 112, para. 6. As noted above, both claims 5 and 7 state that the "connection means interconnect[s] said crank arms on said right and left hydraulic pumps." According to Toro, use of the term "connection means" does not create a presumption that this is a s. 112, para. 6 element because the term is not followed by the word "for." *See, e.g.,* Personalized Media Communications, LLC v. International Trade Comm'n, 161 F.3d 696, 703 (Fed.Cir.1998) (quoting Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1584 (Fed.Cir.1996) (" '[U]se of the term 'means' has come to be so closely associated with 'means-plus-function' claiming that it is fair to say that the use of the term 'means' (particularly as used in the phrase 'means for') generally invokes [s. 112, para. 6] and that the use of a different formulation does not.' "). Rather, Toro

claims that the term "connection means" in the '961 patent 1) recites structure (the "connection," *i.e.*, the linkage), and 2) describes the location (the crank arms on the right and left hydraulic pumps) and the extent of the structure (movable in a first and then a second direction).

As support, Toro depends on a disposable training pants case in which the patent claimed a "perforation means extending from the leg band means to the waist band means through the outer impermeable layer means for tearing the outer impermeable layer means for removing the training brief in case of an accident by the user." Cole v. Kimberly-Clark Corp., 102 F.3d 524, 526 (Fed.Cir.1996). The court found that while the patent drafter "was clearly enamored of the word 'means'," the claim language did not create a means-plus-function element. Id. at 531. The court said that "[a]n element with such a detailed recitation of its structure, as opposed to its function, cannot meet the requirements of [s. 112, para. 6]." *Id*.

Toro maintains that its "connection means"-like the perforation, leg band, waist band, and outer impermeable layer means of the disposable training pants-describes the structural character of the element as well as its location and extent. The plain meaning of the word "connection" means a joining together. In the mechanical arts, Toro says, that joining together "is accomplished by linkages which may include a shaft, rod or arm, or a combination of mechanical links." Toro's *Markman* Brief at 22. In claims 5 and 7, the crank arms secured to the shafts of the hydraulic pumps "are connected together by a common shaft or rod including available linkage components." *Id*. The linkage is indicated by use of term "means" in the claims. Thus, Toro contends that "connection means" should be construed "to cover a linkage between a speed control lever and a crank arm on each hydraulic pump which enables the input and output rates of both pumps to be changed by the same amount so that the drive wheels will be driven at the same rotational rate." *Id*.

Scag, however, contends that Toro has failed to rebut the presumption that its use of the term "connection means" creates a s. 112, para. 6 element since the connection means claims fail to recite any structure to interconnect the crank arms. Scag says that Toro's use of "connect" is therefore functional rather than structural since the claims themselves contain no structural language to override the presumption that s. 112, para. 6 applies. To construe the claims as Toro suggests, Scag says, would require the court to remove the term "means" and substitute the term "linkage," an impermissible rewriting of the claims.

I conclude that Toro's suggested reading of the term would require the court to infuse structure into the claims where no definite structure exists. Nothing prevented Toro from using the term "linkage" instead of the term "means" when writing the claims. Nothing prevented Toro from explicitly defining the structure with the function of "joining together" the crank shafts on the hydraulic pumps. The "perforation means" discussed in the *Cole* case is not analogous to the "connection means" in this case because the disposable training pants had an obvious, definite structure to perform the function of tearing the impermeable layer: the holes punched through the material forming the impermeable layer. Here, Toro can point to no such single, definite structure, only to some sort of functional "connection." In stating that the crank shafts could be connected by numerous types of "linkages," such as "a shaft, rod or arm, or a combination of mechanical links," Toro's *Markman* Brief at 22, Toro in effect attempts to cover any structure that will perform the function of connecting. I therefore find that the term "connection means" is to be construed as means-plus-function element governed by 35 U.S.C. s. 112, para. 6.

4. ***Adjustment Without Tools*** **(claims 5 and 7)**

Neither claim 5 nor claim 7 refers specifically to the use of tools. Rather, the claims state that the adjustment

means allow the operator of the mower to infinitely adjust the tracking of the mower. Claim 5 also states that the adjustment can be made without stopping the mower.

Toro says that an operator would make adjustments manually with the adjustment knob that is part of the mower itself. No other "tools" should be needed. Thus, the court need not construe the term "tools" since the claims nowhere state that adjustments can be made "without tools." Toro maintains that the last clause of claims 5 and 7 requires only "that the recited adjustment means on the mower be adjustable without stopping the mower." Toro's *Markman* Brief at 20.

Scag counters that Toro itself raised the issue of whether the claims contained a limitation that adjustments could be made without tools. In a brief on a different issue, Toro stated that an important feature of the "invention claimed" was that adjustments could be made "without the use of tools." *See* Toro's Brief Opposing Scag's Motion to Depose D. Thomte at 12.

Neither party has presented authority suggesting that a court in ruling on a *Markman* motion should construe alleged "claims" arising from sources outside the patent and the prosecution history. Since claims 5 and 7 do not use the term "tool," I need not reach in this order the question of whether claims 5 and 7 include a limitation that "tools" are required to adjust the mower's tracking.

5. *Adjustable Without Stopping the Mower* (claim 7)

Claim 5 states that the mower's tracking is infinitely adjustable "without bringing the mower to a halt." '961 Patent, col. 7, line 5. Claim 7, however, nowhere requires that the mower be adjustable without stopping it.

Toro admits that claim 7 does not require expressly that the mower be adjustable without stopping it, but argues that the requirement is part of the scope of the claim, added as an amended claim during the prosecution of the patent. Toro states that it told the PTO examiner in presenting the amended claims (now claims 5 and 7) that

the connection means includes adjustment means for infinitely adjusting the tracking of the mower ... without brining [sic] the mower to a halt.... Scag, to the best of applicant's knowledge, does not teach any structure even remotely similar to that described in claims 8 and 9. It is not believed that Scag has a connection means including an adjustment means, in addition to the control levers, which enables the tracking of the mower to be infinitely adjusted as claimed without stopping the mower.... Claim 10 [now claim 7] has been added to the application and is generally similar to claim 8 [now claim 5] except that applicant's invention is somewhat differently described. Applicant submits that claim 10 is allowable for the reasons expressed in support of claim 8 hereinabove.

Plaintiffs' *Markman* Brief at 18 (quoting Filing No. 61, Ex. I, June 5, 1998 Amendment, Prod. No. S002704). Toro says that it amended its claims to distinguish claim 7 from Scag's prior art. Thus, based on these representations to the PTO, Toro maintains that both claims 5 and 7 contain the limitation that the mower be adjustable without stopping it.

Scag argues that not even prosecution history can justify reading language into a claim to create a limitation. I agree. Since a patented invention is defined by its claims, "limitations cannot be read into the claims from the specification or the prosecution history." Burke, Inc. v. Bruno Independent Living Aids, Inc., 183 F.3d 1334, 1340 (Fed.Cir.1999). Since claim 7 contains no language that could be interpreted to require that the

mower be adjusted without bringing the mower to a halt, I find that claim 7 does not include such a limitation.

B. 863/'475 Patents**. Only one term in these patents requires interpretation. The claim language requiring interpretation states: "a plurality of selectively removable mulcher baffles which close said throat portions to define a substantially cylindrical mulching chamber around each of said cutting blades." Filing No. 61, Ex. A, col. 6, lines 32-35, col 8, lines 1-4** ('475 patent)**; Ex. B, col. 6, lines 57-59, col. 8, lines 34-36** ('863 patent)**. At issue is the phrase "close said throat portions."**

Toro contends that the phrase is an unambiguous functional description of what the removable mulcher baffles do: they "close the space between the first and second flow control baffles so that grass clippings are generally confined to the defined area of the cutting chamber for each cutting blade of the mower." Plaintiffs' *Markman* Brief at 25-26. By closing the throat portions, the pair of Y-shaped mulcher baffles defines a cylindrical mulching chamber around each blade. Neither the claims nor the prosecution history limit the height of the removable mulcher baffles.

Scag, for its part, moves beyond the language of the patent claims to consider how high the removable mulcher blades must be to "close" the throat portions between the fixed front and back flow control baffles. Scag maintains that the claim language, as written, requires a removable mulcher baffle to close off the throat portion-regardless of its height in relation to other baffles. Scag contends that the height issue arises because Exmark allegedly failed to disclose to the PTO its prior art removable mulcher baffles found in a mulching accessory. Toro, for its part, insists that Exmark did not disclose to the PTO the details of the prior art mulching accessory because its structure was different than the structure claimed in the '475 patent: the mulching accessory's removable mulching baffles could not "close" the throat portions since they were lower than the rear bird wing baffles. Toro's Brief in Support of Its Motion for Preliminary Injunction at 7, 10.

Pointing to Figure 3 of the '863/'475 patents, Scag argues that the removable mulcher baffles in the patents are still lower than the rear bird wing baffles. Consequently, Scag says that the mulcher baffles cannot "close" the throat portions as required by the patents' claims. Scag therefore insists that the claims as written must be interpreted to mean that the removable mulcher baffles close the throat portions no matter what size they are in relation to the rear baffle.

I agree with Toro that the precise height of the removable mulcher baffles has nothing to do with their function when placed between the fixed front and back flow control baffles. The goal of a *Markman* hearing is to interpret claim language, not to make rulings about a patent's validity based on prior art. I here determine whether the removable mulcher baffles function to close the throat portion, not whether Exmark's prior art mulching kit also had removable mulching baffles that did or did not close the throat portions, and not whether the removable mulcher baffles claimed in this patent work correctly to close off the throat portions. Scag is free to raise the latter issues in a summary judgment motion or at trial when matters of validity are more properly addressed.

Accordingly, I adopt Toro's proposed definition: the phrase "close said throat portions" means that the removable mulcher baffles close the space between the first and second flow control baffles so that grass clippings are generally confined to the defined area of the cutting chamber for each cutting blade of the mower.

IT IS THEREFORE ORDERED that the claim language of the '961 and '863/'475 patents be interpreted as set forth in this order.

D.Neb.,2002.
Toro Co. v. Scag Power Equipment, Inc.

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