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The Toro Company v. White Consolidated Industries, Inc.

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I. BACKGROUND

The Toro Company ("Toro") obtained U.S. Patent 4,694,528 ("528 patent") on September 22, 1997. The "528 patent describes and claims a hand-held convertible vacuum/blower that is useful for yard work. The convertible vacuum/blower can operate in a vacuum mode or a blower mode. In the vacuum mode, the hand-held convertible vacuum/blower is able to vacuum up leaves and other debris. In the blower mode, the hand-held convertible vacuum/blower is able to blow leaves or other debris.

The primary embodiment described in the body of the "528 patent uses a restriction ring as part of an air inlet cover ("cover") to increase the pressure at an air outlet when the convertible vacuum/blower is operated in a blower mode. In other words, the restriction ring is inserted into the air inlet when in the blower mode, but removed from the air inlet when in the vacuum mode. Since the primary embodiment formed the restriction ring as part of the cover, the restriction ring was automatically inserted when the cover was in place for blower operation and was automatically removed when the cover was removed for vacuum operation. In the blower mode, the cover is attached to the housing of the convertible vacuum/blower using a tab and detent system.

White Consolidated Industries, Inc. and WCI Outdoor Products, Inc. (together "White") manufactured and sold a competing convertible vacuum/blower. White's product had a cover and a restriction ring for an air inlet, but the restriction ring was a separate part from the cover. To operate White's product as a blower, the

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1 Mr. Thomas is a partner in the Silicon Valley office of Beyer Weaver & Thomas, LLP. This case note reflects the present thoughts of the author, which should not be attributed to Beyer Weaver & Thomas, LLP or any former, current or future clients of Beyer Weaver & Thomas, LLP. The author is grateful for the assistance provided by Mr. David Banie for his help in preparing this case note.

1. U.S. Pat. No. 4,694,528 to Comer et al. ("528 patent").
restriction ring had to be manually inserted into an air inlet opening and then covered by the cover. To operate as a vacuum, the cover would be opened and the restriction ring manually removed from the air inlet opening. Further, with White’s product, the cover was attached to the housing by a hinge and latch mechanism.

Toro sued White in the U.S. District Court for the District of Minnesota for infringement of claims 16 and 17 of the ‘528 patent. The district court granted Toro’s Motion for Summary Judgement that claim 16 of the ‘528 patent was literally infringed by White’s product. The district court, however, did not consider infringement under the doctrine of equivalents. White then appealed the district court’s decision to the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit").

II. FEDERAL CIRCUIT’S DECISION AND ANALYSIS

This case turned on claim construction. As expected, the Federal Circuit construed claim 16 *de novo* because claim construction is a question of law. Even so, the panel, consisting of Judges Newman, Friedman and Rader, did not all agree. Judges Newman and Friedman signed on to a majority opinion, while Judge Rader authored a dissenting opinion. The majority’s opinion is discussed below, followed by a brief discussion of the dissenting opinion.

The claim at issue, claim 16, was as follows:

16. A convertible vacuum-blower comprising:

[1] a housing having an air inlet and an air outlet;

[2] a motor supported in said housing

[3] an impeller having a plurality of impeller blades supported for rotary motion in said housing, in fluid communication with said air inlet and said air outlet, and rotatably driven by said motor;

[4] a removable air inlet cover for covering said air inlet, said air inlet cover having apertures for passage of air through the cover;

[5] attachment means for removably securing said air inlet cover to said housing; and

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3. See Toro Co. v. White Consolidated Indus., Inc., 920 F. Supp. 1008, 1019 (D. Minn. 1996). Toro had conceded to the district court that claim 17 was not literally infringed. See Toro, 199 F.3d at 1298.
said cover including means for increasing the pressure developed by said vacuum-blower during operation as a blower when air is being supplied to said impeller through said apertured cover.\(^4\)

On appeal, Toro and White disputed the interpretation of two particular phrases within claim 16. Specifically, the phrases of claim 16 in dispute were: (1) “attachment means for removably securing said air inlet cover to said housing” (clause 5), and (2) “cover including means for increasing the pressure” (clause 6).

With respect to the law of claim construction, the majority wanted to interpret the claim as would a person of experience in the field.\(^5\) Although the words in dispute were ordinary or common, the majority felt that the dictionary definitions proffered by each side were not particular helpful.\(^6\) The majority summarized their notion of claim construction as follows:

In judicial “claim construction” the court must achieve the same understanding of the patent, as the document whose meaning and scope have legal consequences, as would a person experienced in the technology of the invention. Such a person would not rely solely on a dictionary of general linguistic usage, but would understand the claims in light of the specification and the prior art, guided by the prosecution history and experience in the technologic field.\(^7\)

A. First Disputed Claim Phrase: Attachment Means

The first claim construction issue concerned the claim element “attachment means for removably securing said air inlet cover to said housing” of clause 5 in claim 16. There was apparently no dispute over whether this claim limitation should be interpreted according to

\(^4\) Toro, 199 F.3d at 1298. Claim 16, ‘528 patent (bracketed numerals added by court). It is interesting to note that the ‘528 patent had 17 claims, of which only claims 1 and 16 were independent claims. See ‘528 patent at col. 7-10. Claim 1, although generally similar to claim 16, was not asserted. Claim 1 is directed to a convertible vacuum/blower but its novelty is focused on a safety switch mechanism that allowed the motor to operate when the air inlet was covered but not when the air inlet was uncovered. See id. at col. 7 (lines 30-47). Claim 16, in contrast, did not include any safety switch mechanism limitations, as its novelty was focused on the “including” of means for increasing the pressure during operation as a blower. See id. at col. 9 (lines 14-18) to col. 10 (lines 1-11).

\(^5\) See Toro, 199 F.3d at 1299.

\(^6\) See id.

\(^7\) Id.
35 U.S.C. § 112, ¶ 6 which is means plus function claim style. The '528 patent described the invention as using a tab and detent system to secure an air inlet cover to the housing of the convertible vacuum/blower. As a result, the tab and detent approach of the '528 patent rendered the air inlet cover completely removable from the housing. In contrast, the White's product used a hinged cover instead of a tab and detent design. As a consequence, White's cover was not completely removable because it always remained attached at the hinge. The majority agreed with the district court that the phrase "removably securing" does not require that the cover be entirely separate from the housing, but instead merely refers to removal of the cover from the air inlet.

The majority then concluded that the district court did not clearly err in ruling that the hinge and latch of White's product were equivalent the tab and detent approach described in the '528 patent. To support this conclusion, the majority points to interchangeability as evidenced by a prior art reference. Specifically, the majority stated: "[t]he use of a latch with a hinged cover is shown in the prior art, performing the identical function of securing the cover to the air inlet during use as a blower, using known interchangeable structures." Despite the design differences, the majority found the attachment means present in White's product. Thus, the majority affirmed the district court's interpretation of the first disputed claim phrase (clause 5).

B. Second Disputed Claim Phrase: Including

The other claim construction question concerned whether clause 6 in claim 16 covers a restriction ring that is not attached to the cover. The pertinent claim language of clause 6 is "said cover including means for increasing the pressure...." Recall, the description of the
primary embodiment of the invention in the '528 patent is a restriction ring as part of the air inlet cover, whereas in White's product, the restriction ring is a separate part from the cover. In the '528 patent, the restriction ring is the structure responsible for the means for increasing pressure.

The district court found that: "the term 'including,' correctly construed, 'suggests the containment of something as a component or subordinate part of a larger whole,' and comprehends a separate restriction ring that is not part of the cover but is separately inserted and removed." In other words, the district court concluded that the cover includes the restriction ring regardless of whether attached to the cover.

On review, the majority noted that this claim construction question—as to whether the restriction ring must be attached to the cover—was not a question under 35 U.S.C. § 112, ¶ 6. The majority considered various things in interpreting whether the words "including" and "cover," as a matter of law, require that the cover and the ring be attached to each other. The majority noted that "[t]he specification and drawings show the restriction ring as 'part of' and permanently attached to the [air inlet] cover." It is also true, as the majority noted, that the specification of the '528 patent does not state that the flow restriction ring and the air inlet cover can be two distinct components. The majority then goes on to disparage the specification of the '528 patent. Specifically, the majority opinion states:

The specification shows only a structure whereby the restriction ring is "part of" the cover, in permanent attachment. This is not simply the preferred embodiment; it is the only embodiment... The description of the invention states that the ring is inserted and removed "automatically" when the cover is inserted or removed. Thus when the cover is closed for operation in the blower mode, the ring that is "attached to the inside of the air inlet cover by a plurality of screws" is thereby put into place. It is inserted simply

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14. Id. (citation omitted).
15. Id. at 1301. This is correct. Fig. 4 of the '528 patent shows a ring 76 formed with an insert 72 that is attached to an air inlet cover 50 (col. 4, lines 47-53; col. 5, lines 19-22). Further, at column 7, lines 6-7 the specification refers to the flow restriction ring 76 as part of the air inlet cover 50. Hence, it is clear that the preferred embodiment of the invention described in the '528 patent formed the flow restriction ring (i.e., means for increasing pressure) as attached or part of the air inlet cover. See '528 patent.
16. See Toro, 199 F.3d at 1301.
by closing the cover; it is removed by opening the cover.\textsuperscript{17}

Finally, the majority concluded that "[t]he specification does not describe an invention broader than this description of the cover and the restriction ring ‘automatically’ inserted and removed together."\textsuperscript{18} In anticipation of the dissent’s objections, the majority also states: "[t]his is not a case of limiting the claims to a ‘preferred embodiment’ of an invention that has been more broadly disclosed. It is well established that the preferred embodiment does not limit broader claims that are supported by the written description."\textsuperscript{19}

Toro also attempted to broaden the interpretation of "including" by relying on the doctrine of claim differentiation. Claim 17 depends from claim 16 and, among other things, indicates that the restriction ring is "carried by the cover." Hence, claim 17 would seem to support (under the guise of the doctrine of claim differentiation) requiring that the term "including" be broadly read as Toro desired. Instead, the majority concluded that "the doctrine of claim differentiation does not serve to broaden claims beyond their meaning in light of the specification, . . . and does not override clear statements of scope in the specification and prosecution history."\textsuperscript{20}

Accordingly, the majority found that the term "including" of clause 6 in claim 16 required that the restriction ring be attached to the cover. Thus, the majority reversed the district court’s interpretation of clause 6 in claim 16.

III. DISSENTING OPINION

The dissenting opinion by Judge Rader finds at least three areas where he believed the majority’s opinion was wrong in narrowly construing the term “including.” First, ordinary dictionaries and law dictionaries leave no doubt that the ordinary meaning of “includes” is not limited to physical attachment.\textsuperscript{21} Second, traditionally speaking, the term “including” is used to signify a broader relationship than

\textsuperscript{17} Id.
\textsuperscript{18} Id. Note that the Federal Circuit cites 37 C.F.R. § 1.83(a) (1999) ("The drawing in a nonprovisional application must show every feature of the invention specified in the claims.") as somehow supporting their position, unfortunately, 37 C.F.R. 1.83(a) has nothing to do with claim construction.
\textsuperscript{19} Toro, 199 F.3d at 1301. (citing, e.g., Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 865 (Fed. Cir. 1988)). Question: Was claim 16 part of the original description that could bootstrap itself as self-defining the scope of the invention and therefore never be broader than that disclosed?
\textsuperscript{20} Id. at 1302 (citations omitted).
\textsuperscript{21} See id. at 1303 (Rader, J., dissenting).
merely being attached.\textsuperscript{22} Third, Judge Raider believed that the specification described more than one embodiment, specifically, an embodiment in which the flow restriction ring is not permanently attached to the cover.\textsuperscript{23}

IV. CONCLUSIONS

As to the first disputed claim phrase, the Federal Circuit allowed the prior art to expand claim coverage with respect to equivalents for means plus function elements. Although this result was assisted somewhat by the clearly erroneous standard of review, it is nevertheless significant that prior art was used to broaden the available range of equivalents. While means plus function claim elements are not generally restricted by the prior art, courts have been reluctant to provide such claim elements anything but a narrow scope of equivalents. Here, the background section of the '528 patent mentioned the prior art reference that assisted with broadened equivalents determination, but its discussion of the prior art reference was with respect to a general introduction of convertible vacuum/blowers and thus was not in reference to a particular problem that the invention solved.\textsuperscript{24}

As to the second disputed claim phase, the majority's narrow reading of the term "including" resembles the Federal Circuit's trend in interpreting claims narrowly when there is doubt as to what is covered. However, in this case, the meaning of the term "including" was sufficiently clear and there was no reasonable justification for the majority's narrow interpretation.

The majority's failure to appreciate the specification led them to erroneously conclude that the specification had clear statements against the ring being anything but attached to the cover. Unlike the majority's conclusions, there are no clear statements of scope in the specification or the prosecution history that would lead someone to believe that "includes" should be narrowly read.\textsuperscript{25} Further, looking at

\textsuperscript{22} See \textit{id.}

\textsuperscript{23} See \textit{id.} at 1303-1304. Here, the dissenting opinion states: "More important, the inventor contrasts the preferred embodiment not, as the court thinks, with disadvantageous prior art, but rather with a less-preferred embodiment of the invention at hand: a blower with a replaceable, i.e., non-attached, ring." \textit{Id.} at 1303. \textit{See also} '528 patent, col. 7 (lines 6-12).

\textsuperscript{24} The problems associated with the prior art were however not focused on the attaching of the cover, but instead on safety hazards when converting its modes as well as on velocity of air being output.

\textsuperscript{25} The majority points to nothing in the prosecution history as assisting their interpretation.
the language at column 7, lines 6-12 of the '528 patent (on which the majority places so much emphasis), one should note that it states that the automatic nature of removing of the ring (by being part of the cover) is "also advantageous." The word "also" suggests that this feature of the invention is not mandatory. In other words, this section of the '528 patent is indicating that it is advantageous to have the restriction ring part of the cover. Normally, such a statement would suggest that the feature is then an optional (i.e., not mandatory) feature of the invention. The majority's reading of this same portion of the '528 patent to say that there are clear statements of scope in the specification for their narrow interpretation is without justification. The dissent is much closer to the mark on this point.

The majority has narrowed the term "including" to the primary embodiment described in the '528 patent. However, patent practitioners, those who actually write the patent claims, would not have construed the term "including" the way that the majority opinion does. The term "including" is designed to be a broad open-ended term. It is not intended to provide a structural indication in most cases. According to the majority's rationale, the interpretation of the term "including" was read in a narrow fashion because the majority felt that was the scope that was described in the body of the specification.

Still further, dependant claim 17 with the help of the doctrine of claim differentiation clearly indicates that "including" in claim 16 was intended to be broader than "carried by" as was used in claim 17. The majority shows no respect for the beleaguered doctrine of claim differentiation. Had the majority had any respect for the doctrine, this case would have seemed to be the perfect situation where the doctrine would be helpful in determining whether the applicant intended to use

26. It is also used essentially interchangeably with "comprising," particularly when used as a transition phrase. See, e.g., J. Landis, Mechanics of Patent Claim Drafting § 7 (1970); Donald S. Chisum, Chisum on Patents § 8.06[1][b], at 8-101 (1998) ("including" can also be used to draft an "open" claim); Hewlett Packard Company v. Repeat-O-Type Stencil Manufacturing, 123 F.3d 1445, 1451 (Fed. Cir. 1997) (claim term "including" is synonymous with "comprising" as a transition phrase at least thereby permitting the inclusion of unnamed components).

27. While the body of the specification was such that the primary embodiment did have the ring attached to the cover, if a patent practitioner had intended the claims to be so limited, they would have used language such as "part of" or "attached" in the claim instead of "including." The majority also ignores column 7, lines 12-18 of the '528 patent which states that another advantage of the invention is using a safety switch mechanism. This advantage was not mandatory to claim 16, but the majority's improper reading of the preceding sentence in the '528 patent was deemed mandatory. In reality, these were merely recitations of potential advantages obtained by the invention, not mandatory requirements.
the term “including” broadly.

In effect, the majority’s opinion suggests that regardless of what language a claim may use, the claim can be limited to the primary embodiment described in the body of the patent’s specification. In other words, the majority suggests that claims cannot be construed apart from the specification and that claims, which are potentially broader, can be narrowly construed. This suggestion of the majority’s opinion is wrong because the claims define the invention and can exceed the scope of the body of the specification. Of course, one could always blame the patent practitioner for perhaps not using the best choice of claim language for clause 6 in claim 16.28

Another interesting result of this case was that the first disputed claim phrase, which was interpreted under 35 U.S.C. § 112, ¶ 6, was given a liberal interpretation, while the second disputed claim phrase, which was not interpreted under 35 U.S.C. § 112, ¶ 6, was given a restrictive interpretation. In any event, the case was remanded back to the district court for consideration of whether White’s product infringes claim 16 under the doctrine of equivalents. If the prior art and the prosecution history allow, White’s product would likely be found to infringe claim 16 under the doctrine of equivalents.

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28. Namely, claim 16 would have been better if the means for increasing the pressure were recited simply as that and not utilizing the associative language “said cover including.”