United States Court of Appeals for the Federal Circuit

2006-1576

THE SAUNDERS GROUP, INC.,

Plaintiff-Appellant,

٧.

COMFORTRAC, INC., and CARE REHAB AND ORTHOPAEDIC PRODUCTS, INC.,

Defendants-Appellees.

<u>William L. Roberts</u>, Faegre & Benson LLP, of Minneapolis, Minnesota, argued for plaintiff-appellant. With him on the brief were <u>Calvin L. Litsey</u>, <u>Chad Drown</u>, and <u>Timothy E. Grimsrud</u>. Of counsel on the brief was <u>Kenneth C. Bass, III</u>, Sterne, Kessler, Goldstein & Fox PLLC, of Washington, DC.

Ahmed J. Davis, Fish & Richardson P.C., of Washington, DC, argued for defendants-appellees. With him on the brief were Ruffin B. Cordell and Richard A. Sterba.

Appealed from: United States District Court for the Eastern District of Virginia

Judge Leonie M. Brinkema

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DECIDED:	June 27, 2007

Before MICHEL, <u>Chief Judge</u>, BRYSON and DYK, <u>Circuit Judges</u>. BRYSON, <u>Circuit Judge</u>.

The Saunders Group, Inc., brought this patent infringement action in the United States District Court for the Eastern District of Virginia, Docket No. 1:05cv69. Saunders alleged that the defendants are liable for infringement of U.S. Patent No. 6,899,690 ("the '690 patent"). The district court granted summary judgment of noninfringement on the ground that the asserted independent claims of the '690 patent require, as one of the limitations of each of those claims, the presence of at least one pressure activated seal, a limitation that is not found in the accused devices. Saunders now appeals. We hold that the district court's claim construction was erroneous, and we therefore reverse the grant of summary judgment and remand for further proceedings.

Saunders competes with the defendants in the market for relatively inexpensive and lightweight cervical traction devices. Cervical traction is a physical therapy treatment in which a device is used to generate a sustained force pulling upward on the patient's neck so as to relieve pressure on enflamed or enlarged nerves. The devices at issue in this case allow patients to treat themselves at home.

Both asserted independent claims of the '690 patent, claims 1 and 16, are directed to a portable cervical traction device. For purposes of this appeal, those claims are identical. Claim 1 reads as follows:

A cervical traction device comprising:

- [1] a support structure having a track;
- [2] a carriage having a slide bracket slidable along a portion of the track;
- [3] a restraining mechanism adapted to releasably restrain a portion of a patient's body to the carriage;
- [4] a pneumatic cylinder having a first end and a moveable piston rod at a second end, one of the pneumatic cylinder or the piston rod attached to the support structure and the other attached to the carriage, the pneumatic cylinder adapted to move the carriage along the track relative to the support structure when in a pressurized state, the pneumatic cylinder maintaining a generally static traction force for a period in excess of 10 minutes when in the pressurized state without additional pressurized air being supplied; and
- [5] a hand pump fluidly connected to the pneumatic cylinder and adapted to inject pressurized air into the pneumatic cylinder, the hand pump having a handle moveable relative to a body portion to injecting at least 138 kPa (20 psi) of pressure into the pneumatic cylinder.

Claim 16 is identical to claim 1 except that in the fourth limitation it recites "during a treatment period" in place of "for a period in excess of 10 minutes."

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According to the '690 patent, portable traction devices that were available at the time of the invention were unsatisfactory because of shortcomings in the methods by which the devices produced the traction force. Pneumatic cylinders with low pressure inputs could not maintain the required force for the requisite amount of time, and hydraulic cylinders were not sufficiently portable. '690 patent, col. 1, II. 35-43.

The '690 patent is the product of the third in a sequence of related applications. The first application, U.S. Ser. No. 08/334,189 ("the '189 application"), was directed to a "portable traction device powered by a pneumatic cylinder." That application did not issue as a patent. The second application, which eventually matured into U.S. Patent No. 6,506,174 ("the '174 patent") and which has the same specification as the '690 patent, was a continuation in part of the '189 application. The '174 patent contains claims to lumbar traction systems; it issued after two rejections and an appeal to the Board of Patent Appeals and Interferences. All the claims in the '174 patent explicitly require a pneumatic cylinder having at least one pressure activated seal. The pneumatic cylinder portion of claim 1 of the '174 patent is representative and reads as follows, with the "pressure activated seal" limitation emphasized:

a pneumatic traction force generating apparatus comprising a pneumatic cylinder attachable to the support structure adapted to move the carriage relative to the support structure when the pneumatic cylinder is in a pressurized state, the pneumatic cylinder having at least one pressure activated seal extending circumferentially around a piston, the pressure activated seal movable between a relaxed position and an extended position so the pressure activated seal engages an internal surface on the pneumatic cylinder when the pneumatic cylinder is in the pressurized state, the pneumatic cylinder maintaining a static traction force for a period in excess of 10 minutes when in the pressurized state without additional pressurized air being supplied

The application that led to the issuance of the '690 patent was a continuation of the application that led to the '174 patent. It claimed a cervical traction system instead of a lumbar traction system, and it omitted any reference to a "pressure activated seal" in two of the independent claims (claims 1 and 16) and in most of their dependent claims. The "pressure activated seal" limitation was explicitly included in two other independent claims (claims 14 and 15) and in two of the claims that depended from claim 1 (claims 6 and 7). In connection with that application, the inventors filed a Petition to Make Special in which they alleged that there was a device on the market that infringed certain specified claims of the application. In that petition, Saunders referred to one of the cervical traction devices at issue in this case. Although the petition did not specifically discuss pressure activated seals, the only claims alleged to be infringed were those that did not contain an explicit limitation directed to pressure activated seals. The Patent and Trademark Office granted the petition and conducted an expedited examination. The '690 patent was issued after the patentees overcame various rejections. Saunders filed the present infringement action 10 days later.

In a combined claim construction and summary judgment opinion, the district court held that the term "pneumatic cylinder" in claim 1 is limited to pneumatic cylinders containing at least one pressure activated seal. The court noted that the specification "only disclosed one embodiment for the internal workings of the claimed pneumatic cylinder" and that the specification "teaches no alternative means by which the pneumatic cylinder can maintain the required traction force." The court also ruled that the prosecution history of the '174 patent contained an unequivocal disclaimer of O-ring type seals in particular and any seal other than a pressure activated seal in general.

Because Saunders admitted that the accused devices do not use pressure activated seals, the court granted summary judgment of noninfringement.

П

On appeal, Saunders argues that the district court improperly limited the scope of the term "pneumatic cylinder." Saunders contends that the term "pneumatic cylinder" does not inherently require the presence of a pressure activated seal and that nothing in the specification or the prosecution history suggests that the term pneumatic cylinder, as used in the patent, requires such a seal. For that reason, Saunders argues, claim 1 of the '690 patent reads on the accused products, which have pneumatic cylinders without pressure activated seals.

Claim terms are generally given the meaning those terms would have to a person of ordinary skill in the art. Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). It is not disputed that the ordinary meaning of the term "pneumatic cylinder" does not require the presence of pressure activated seals. The asserted claims can be assigned a narrower scope only if there is some indication in the patent or the prosecution history that the term pneumatic cylinder was meant to have a more restrictive meaning as used in the patent, or a broader meaning was disclaimed during prosecution. See Phillips, 415 F.3d at 1316; Honeywell Int'l, Inc. v. ITT Indus., Inc., 452 F.3d 1312, 1319-20 (Fed. Cir. 2006); SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1342-44 (Fed. Cir. 2001). We conclude that the text of the '690 patent and its prosecution history do not justify such a restrictive construction of the term.

The strongest indication that the term pneumatic cylinder, as used in the '690 patent, was not meant to include pressure activated seals as a matter of definition can be found in a comparison of independent claim 1 and claim 6, one of the claims that depend from claim 1. Claim 1 recites a pneumatic cylinder but does not expressly require a "pressure activated seal." Claim 6 recites the apparatus of claim 1 and then adds a limitation reciting a pressure activated seal. Claim 6 reads as follows (emphasis added):

The apparatus of claim 1 comprising at least one pressure activated seal in the pneumatic cylinder extending circumferentially around a piston, the pressure activated seal movable between a relaxed position and an extended position so the pressure activated seal engages an internal surface on the pneumatic cylinder when the pneumatic cylinder is in the pressurized state for engagement with an inside surface of a cylinder housing when in the pressurized state.

Given that claim 6 adds the pressure activated seal limitation to claim 1, the doctrine of claim differentiation supports the inference that claim 1 encompasses cylinders without pressure activated seals. Otherwise, claim 6 would add nothing to claim 1 and the two would cover identical subject matter. See Phillips, 415 F.3d at 1314-15 ("[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim."); Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed. Cir. 2004).

The defendants argue that there is a meaningful difference in scope between claim 1 and claim 6 under their construction because claim 6 requires the seal to "extend[] circumferentially around a piston" while being movable so as to engage the cylinder in a particular place. That language from claim 6, however, is better read as

simply definitional language that describes the operation of a pressure activated seal. The patent does not disclose any other way of constructing a pressure activated seal, and the recitation of the operation of the pressure activated seal adds nothing of substance to the recitation of the seal itself. The defendants have not pointed to any evidence that those of skill in the art would have understood the referenced language as carving out a subset of all pressure activated seals.

The prosecution history of the '690 patent provides further support for Saunders' argument that the term "pneumatic cylinder," as used in the patent, is not restricted to pneumatic cylinders that use pressure activated seals. The '690 patent resulted from a continuation application claiming priority to an application that specifically required at least one pressure activated seal in all its claims. When the patentees filed the continuation application, they omitted that limitation from some, but not all, of the new claims. Had they omitted the limitation from all of the claims, it might be argued that the limitation was assumed to be present and did not need to be explicitly recited. Making such a change to only some of the claims, however, is a strong indication that the claims not reciting pressure activated seals were not intended to require them.

The Petition to Make Special is also significant because the applicants asserted in that document that a device lacking a pressure activated seal infringed the independent claims of the application. To be sure, the petition did not specifically discuss pressure activated seals. It is undisputed, however, that the petition accused the device of infringing only those claims that lacked a pressure activated seal requirement and that the accused device had no pressure activated seals. Under those

circumstances, the petition indicates that the applicants did not regard the presence of pressure activated seals as a necessary condition for infringement of those claims.

В

The defendants point to various features of the patent and the prosecution history in support of their argument that one of skill in the art would necessarily conclude that only pneumatic cylinders with pressure activated seals are within the scope of claims 1 and 16 of the '690 patent. They first contend that such a limitation is evident from the claim language requiring that the cylinder be capable of "maintaining a generally static traction force for a period in excess of 10 minutes when in the pressurized state without additional pressurized air being supplied." Because the specification does not describe any pneumatic cylinders without pressure activated seals, and because the specification does not disclose any other way to maintain the necessary traction force, the defendants argue that a person of skill in the art would understand that a pressure activated seal is necessary to maintain the recited traction force. Accordingly, they contend that the claims must be limited to pneumatic cylinders with pressure activated seals.

A patent that describes only a single embodiment is not necessarily limited to that embodiment. <u>Liebel-Flarsheim</u>, 358 F.3d at 906 (citing cases). "Even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope" <u>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</u>, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (internal quotations omitted). While an assertion by the patentee that using pressure activated seals is the only way to maintain the needed traction force would

evidence an intention to narrow the scope of the independent claims, the patent contains no such assertion.

To be sure, the specification of the '690 patent, which is identical to the specification of the parent '174 patent, contains passages that describe the portable traction device as comprising at least one pressure activated seal. See '690 patent, abstract; col. 2, II. 13-16. But those passages do not expressly state that the pressure activated seal is an essential component of the invention. While the restrictive language of the specification might be sufficient in other contexts to limit the scope of the claims, it is not sufficient in this case, where the language of the claims so clearly distinguishes between those claims that require the presence of a pressure activated seal and those that do not. See Liebel-Flarsheim, 358 F.3d at 908.

The defendants argue that the specification in this case closely resembles the one at issue in Alloc, Inc. v. International Trade Commission, 342 F.3d 1361 (Fed. Cir. 2003). In that case, the court construed the claims to include a feature that was common to all the disclosed embodiments but was not explicitly recited as a limitation in any of the claims. The claims at issue in Alloc recited floor system features related to "displacement" and "disassembly" of the flooring components. Id. at 1368. The court construed the claims to require "play" between the flooring components because the patent specifically taught that such play enabled the displacement and disassembly features and because the patent criticized prior art systems that lacked play as being impossible to disassemble nondestructively. Id. at 1369-70. In contrast, the '690 patent does not criticize prior art cylinders based on their lack of pressure activated seals. The specification indicates that pneumatic cylinders "typically" cannot maintain an adequate

traction force, but the patent does not state that the only way to accomplish the goal of maintaining traction force is through the use of pressure activated seals. Accordingly, the specification does not support the narrowing construction that the defendants propose.

The defendants next argue that in the prosecution history the applicants unambiguously disclaimed pneumatic cylinders lacking pressure activated seals. making that argument, the defendants focus on the prosecution history of the parent '174 patent. The fact that the prosecution history relied upon was created in connection with the parent application would be unimportant if the claim language at issue were present in both patent applications. In this case, however, all the claims in the '174 patent explicitly require at least one pressure activated seal while the '690 patent omits that language from the asserted claims. At the same time, the alleged disclaimer distinguishing the prior art focused on a particular claim limitation—the "pressure activated seal" limitation found in each of the claims of the '174 patent—and was not directed to the invention as a whole. See SciMed Life Sys., 242 F.3d at 1343-44. When the purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself), those disclaimers do not apply. Ventana Med. Sys. v. Biogenex Labs., 473 F.3d 1173, 1182 (Fed. Cir. 2006) ("[T]he doctrine of prosecution disclaimer generally does not apply when the claim term in the descendant patent uses different language."); Invitrogen Corp. v. Clontech Labs., Inc., 429 F.3d 1052, 1078 (Fed. Cir. 2005) ("[T]he prosecution of one claim term in a parent application will generally not limit different claim language in a continuation application."); Advanced Cardiovascular Sys. v.

Medtronic, Inc., 265 F.3d 1294, 1305-06 (Fed. Cir. 2001) (omitting the claim term to which the prosecution history disclaimer argument was directed precluded those statements from being applied to the child application). Accordingly, any arguments in the prosecution history of the '174 patent that distinguish prior art based on the presence or absence of a pressure activated seal are inapplicable to the '690 patent.

The defendants contend that there is common language in the applications and that the statements in the prosecution history of the '174 patent apply to that common language. They note that the patentees distinguished the '174 patent claims not only by arguing that the prior art lacked pressure activated seals, but also by arguing that the prior art pneumatic cylinders were unable to maintain the required traction force, a requirement that is found in both the '174 patent and the '690 patent. While the statements about traction force apply to both the '174 patent and the '690 patent, they do not establish that the cylinder in the '690 patent must contain a pressure activated seal. That is, the prosecution history contains no argument that the prior art devices failed to maintain the requisite traction force because of the absence of activated seals.

The first passage from the prosecution history cited by the defendants distinguishes a prior art patent to Loveless. The relevant portion of the argument reads as follows:

The seal in Loveless is a conventional O-ring 37 that does not change shape with air pressure. The O-ring 37 is always engaged with the engagement surfaces 41, 42 so that the level of friction between the cylinder sleeve 14 and the piston 23 is generally constant. Therefore, Loveless does not disclose the claimed pressure activated seal, and no prime facie case of obviousness is set forth.

It is asserted on page 6 of the office action that the cylinder of Loveless would be able to maintain a static traction force for a period in excess of 10 minutes since the air leakage in the cylinder will not occur. There is no teaching in Loveless for this capability. Moreover, Applicants'

experience has been that such pneumatic cylinders do leak over time and are not sustainable for maintaining a static traction force. Applicants submit that the combination and [sic] Dyer and Loveless fails to disclose the claimed pressure activated seal and a pneumatic cylinder capable of maintaining a static traction force for a period of time without addition of pressurized air being supplied.

The first paragraph of that passage distinguishes Loveless based on the absence of the claimed pressure activated seal and thus is not relevant to the '690 patent claims at issue. The first three sentences of the second paragraph are relevant to the '690 patent, but they argue only that the Loveless seal is incapable of maintaining the required traction force. They do not state that the Loveless cylinder lacks the capacity to maintain sufficient traction force because it lacked a pressure activated seal. Rather, the two paragraphs address different limitations of the claims, the seal and the need to maintain traction force. The last sentence is consistent with the two-part structure of the argument and in effect summarizes the two distinguishing arguments. Accordingly, the cited passage does not constitute a disclaimer of all cylinders lacking pressure activated seals, as the defendants contend.

The second passage relied on by the defendants discusses a prior art patent to Gantz. That passage reads as follows:

The use of [the] rolling diaphragm type piston and cylinder arrangement disclosed in Gantz may be the result of the small vacuum pump. The pump disclosed in Gantz develops about 0.5 torr of pressure.... The small pressure generated by the pump of Gantz makes an air tight piston system with little or no friction extremely important. Applicants speculate that any friction due to the sliding seals or air leakage would render the traction device of Gantz inoperative.

That argument also fails to demonstrate a relationship between maintaining the traction force and the presence of pressure activated seals. The passage argues only that the particular seal disclosed in Gantz would not be feasible for use in the patentee's

invention because it does not maintain the required traction force. While that passage rejects the particular seal used in Gantz as sufficient to satisfy the requirements of the invention, it does not mean that the invention excludes all seals other than pressure activated seals.

C

The district court concluded that, "[a]t the very least, the specification and prosecution history . . . make claims 1 and 16 of the '690 Patent ambiguous as to whether the pneumatic cylinder must utilize at least one pressure activated seal." In that setting, the court held that it was proper to apply the maxim that claims should be construed to preserve their validity. See Phillips, 415 F.3d at 1326. The court further concluded that if claims 1 and 16 were construed broadly, they would not be enabled because the specification "would provide absolutely no indication of how to construct the claimed invention because a pneumatic cylinder 'having at least one pressure activated seal' is the only pneumatic cylinder described in the specification" and because the inventors made clear that they did not believe an ordinary O-ring seal would work in a device of the sort they claimed.

In light of the structure of the claims (with some reciting pressure activated seals and others lacking that limitation), the focus of the Petition to Make Special on the defendants' device, and the absence of any clear disclaimer in the specification or the prosecution history, we hold that the term "pneumatic cylinder," as used in the '690 patent, encompasses cylinders that do not use pressure activated seals, and that claims 1 and 16 are not ambiguous. For that reason, it was error for the district court to use the possible invalidity of those claims, if broadly construed, as a basis for construing

them narrowly. <u>See Liebel-Flarsheim</u>, 358 F.3d at 911. That is not to say that we reject the district court's validity analysis; we hold only that the court's validity analysis cannot be used as basis for adopting a narrow construction of the claims. Instead, any validity issues that the defendants have preserved and wish to press can be addressed on remand, as was done in the <u>Liebel-Flarsheim</u> case. <u>See Liebel-Flarsheim Co. v. Medrad, Inc.</u>, 481 F.3d 1371 (Fed. Cir. 2007) (holding invalid claims that had been given a broad construction at the patentee's behest in an earlier appeal).

While we reverse the district court on the issue of claim construction, we do not suggest that the resolution of the claim construction issue presented in this case, or in other similar cases, is easy or that the outcome is dictated by the straightforward application of patent law principles. Cases such as this one, in which predecessor applications or patents were drawn to narrow claims and in which the claims in the successor application are arguably broader than the invention described in the specification, present difficult questions of both claim construction and validity. Where the applicant expressly and unambiguously states his intention to claim broadly, the claim construction issue is easier and the question becomes one of validity—whether the specification supports the full breadth of the new claims. On the other hand, where—as in this case—the patentee has not been explicit about the scope of the new claims, the case can pose interdependent problems of both claim construction and validity. We have concluded that the change in claim language between the '174 patent and the '690 patent, and in particular the inclusion of the "pressure activated seal" limitation in some claims and its omission from others, is a sufficiently powerful indicator as to the proper construction of the asserted claims that it outweighs the portions of the

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specification in which the invention is described narrowly. We emphasize, however, that the problem is a difficult one, made more so by the failure of applicants to state expressly to the examiner, whether for tactical reasons or otherwise, the extent to which they intended their new claims to depart from the scope of the claims in the predecessor applications. In many such cases, as in this one, we and the district court are required to draw sometimes conflicting inferences from different sources of guidance as to proper claim construction and to weigh those conflicting inferences in reaching a conclusion as to the proper construction. After engaging in that process in this case, we reach a different result from that reached by the district court, but not easily.

D

Finally, the defendants argue that even under Saunders' proposed claim construction, one of the accused devices plainly does not infringe and that the trial court's judgment should be affirmed with respect to that device in any event. We decline to address that factual question and instead leave all issues of infringement to be resolved on remand. We hold only that the district court's claim construction was erroneous, and on that basis we reverse the summary judgment of noninfringement. We remand for further proceedings on all remaining issues presented in this case.

Each party shall bear its own costs for this appeal.

REVERSED and REMANDED.