

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

BAXTER INTERNATIONAL, INC.,)	
BAXTER HEALTHCARE CORP., AND)	
BAXTER HEALTHCARE S.A.,)	
)	12C6890
Plaintiffs,)	
)	Judge John Z. Lee
v.)	
)	
FRESENIUS MEDICAL CARE HOLDINGS,)	
INC., d/b/a FRESENIUS MEDICAL CARE)	
NORTH AMERICA and FRESENIUS USA,)	
INC.,)	
)	
Defendant.)	

MEMORANDUM OPINION AND ORDER

Baxter International, Inc., Baxter Healthcare Corp., and Baxter Healthcare S.A. (“Baxter”) have sued Fresenius Medical Care Holdings, Inc. d/b/a Fresenius Medical Care North America and Fresenius USA, Inc. (“Fresenius”) alleging infringement of four patents: U.S. Patent Nos. 7,815,595 (“the ’595 patent”); 8,066,671 (“the ’671 patent”); 8,075,526 (“the ’526 patent”); and 8,206,338 (“the ’338 patent”). This case is before the Court for the construction of four groups of claim terms.

Background

The four patents-in-suit relate to “a disposable cassette-based pumping mechanism for a peritoneal dialysis machine.” Defs.’ Opening Claim Construction Br. 1 (“Defs.’ Br.”). Peritoneal dialysis is a process to treat renal failure by pumping a solution, dialystate, into the peritoneal cavity in the abdomen. Pls.’ Resp. Claim Construction Br. 2 (“Pls.’ Br.”). Waste from the body enters the dialystate and leaves the body when the dialystate is drained. *Id.* Automated peritoneal dialysis (“APD”) machines can perform the pumping and draining of

dialystate without any input from the patient, thereby freeing the patient to sleep through the process. *Id.*

The '595, '671, and '526 patents share a common specification and are related to a common parent application filed on May 24, 2002. Pls.' Br. 3; Defs.' Br. 1. The '338 patent relates to a different parent application, filed December 31, 2002, and shares one common inventor with the other three patents. Pls.' Br. 2; Defs.' Br. 1.

The '595, '671, and '526 patents describe a disposable cassette with two opposing membranes. Defs.' Br. 1. The disposable cassette is placed into the dialysis machine, which applies a vacuum to the membranes. *Id.* at 2. This causes one membrane to be held against the wall of the dialysis machine while the other membrane is held against a piston, creating a chamber between the two membranes. *Id.* When the piston moves, one membrane is manipulated so as to increase or decrease the volume of the chamber, which acts to pump the dialystate in or out of the chamber. *Id.*

The '338 patent involves a similar disposable cassette. *Id.* But in this instance one membrane is held against the moving piston, while the other is replaced by a rigid wall. *Id.*

Legal Standard

Interpretation of patent claims is a question of law to be decided by a judge, not a jury. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996). The Court first looks to the intrinsic evidence, which consists of the patent itself, including claims, the specification, and prosecution history. *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The words of a claim “are generally given their ordinary and customary meaning.” *Id.* Ordinary and customary meaning is that understood by “a person having ordinary skill in the art in question on the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d

1303, 1312-13 (Fed. Cir. 2005) (*en banc*). However, the “patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.” *Vitronics*, 90 F.3d at 1582.

Terms are given “the meaning and scope with which they are used in the specification and the prosecution history.” *Kinik Co. v. ITC*, 362 F.3d 1359, 1365 (Fed. Cir. 2004). The specification is usually “dispositive; it is the single best guide to the meaning of a disputed term.” *Vitronics*, 90 F.3d at 1582.

The prosecution history may serve to further “exclude any interpretation that was disclaimed during prosecution.” *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005). However, a claim may not be narrowed “simply by pointing to the preferred embodiment or other structures or steps disclosed in the specification or prosecution history.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). It is well established 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.” *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1327 (Fed. Cir. 2012) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1342 (Fed. Cir. 2010)). “[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

Beyond the intrinsic evidence, extrinsic evidence such as expert testimony, dictionaries, and treatises “may be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history.” *Markman v. Westview*

Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995). However, extrinsic evidence may be used only if the intrinsic evidence alone is insufficient to determine the meaning of the claim terms. *Vitronics*, 90 F.3d at 1583.

Finally, the doctrine of “claim differentiation” provides that “each claim in a patent is presumptively different in scope.” *RF Del., Inc. v. Pac. Keystone Techs., Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003). “That presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim.” *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007).

Discussion

I. “Pneumatic source” and “vacuum source”

The phrase “a pneumatic source for supplying a negative pressure” appears in claims 1, 10, and 18 of the ’671 patent. ’671 Patent 56:51, 57:36, 58:25. The similar phrase “at least one vacuum source operable to apply a vacuum” is used in claims 1 and 25 of the ’526 patent. ’526 Patent 56:59, 59:1. A third phrase, “a vacuum source pneumatically connected to a vacuum chamber,” appears in claim 1 of the ’338 patent. ’338 Patent 42:62. Baxter argues that the vacuum or pneumatic source referenced by these claims must be “an air pump motor and a vacuum line for supplying a negative pressure/vacuum.” Pls.’ Br. 17. On the other hand, Fresenius argues that the meaning of these phrases is commonly understood to a person having ordinary skill in the art and should be given their plain meaning. As a result, at least according to Fresenius, the Court should not read the concept of a “vacuum line” into the claim term. Defs.’ Br. 8.

Baxter supports its proposed construction by pointing out that a vacuum line is necessary in order for the pneumatic or vacuum source to deliver the negative pressure or vacuum to the

target area. Pls.’ Br. 17. For example, Baxter observes that claim 1 of the ’671 patent requires that the pneumatic source is “configured to apply the negative pressure to the moveable membrane of the disposable unit.” *Id.* Baxter believes that, to satisfy this arrangement, “the vacuum *must* pass through a vacuum line.” *Id.* But there is nothing in the intrinsic evidence or the language of the claims themselves mandating that the terms “pneumatic source” or “vacuum source” be limited to include a vacuum line in all cases. The inventors certainly could have limited the claims to an air pump with a vacuum line, if they so desired. Instead, they elected to define the invention in broad structural terms. As the Federal Circuit stated in *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002), “[g]enerally speaking, we indulge a ‘heavy presumption’ that a claim term carries its ordinary and customary meaning. . . . ‘[I]f an apparatus claim recites a general structure without limiting that structure to a specific subset of structures, we will generally construe the term to cover all known types of that structure’ that the patent disclosure supports.” *Id.* (internal quotations omitted).

For its part, Baxter cites to Figure 1 contained in the common specification of the ’671, ’526, and ’595 patents, which is described as containing “a vacuum source 44, including an air pump motor 46.” Pls.’ Br. 18. Baxter also refers the Court to the specification of the ’338 patent which teaches that “[c]onnectors 50 connect to negative pressure supply tubes that run to a source of negative pressure (not illustrated).” Pls.’ Br. 19. However, the figures upon which Baxter relies are merely embodiments of the invention. *See* ’671 Patent 9:51 (describing Figure 1 as “an embodiment”); ’338 Patent 8:7-8 (describing the figure as “an embodiment of a valve and pump actuation assembly . . .”). And, “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.” *Dealertrack*, 674 F.3d at 1327 (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d at 1342. *See also Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 909 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using “words or expressions of manifest exclusion or restriction.”) (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)). Here, the intrinsic evidence is devoid of a clear indication that the inventors wanted to limit the source to an air pump with a vacuum line. Certainly, an air pump with a vacuum line may be an excellent pneumatic or vacuum source, but there is nothing in the intrinsic record to suggest it is the only source claimed by the patents to the exclusion of all others.

Baxter’s reliance upon the prosecution history also is unavailing. Baxter is correct that, during the prosecution history, it clarified that the inclusion of the term “vacuum source” was a structural limitation. But nowhere in its response to the examiner did Baxter state that the “vacuum source” had to be an air pump with a vacuum line. (Joint Appendix (“JA”) at 007797-007811.) Again, an air pump-vacuum line arrangement may be the most practical or efficient configuration, but there is nothing in the intrinsic evidence to limit the terms “pneumatic source” or “vacuum source” to such a structure.

“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. Indeed, in such instances, attempting to construe the terms in question would merely paraphrase one set of words with another and risk creating additional ambiguity, rather than clarity. *See, e.g., U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d

1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”). The Court believes that the terms “pneumatic source” and “vacuum source” as they appear in the patents in suit fall within this category, and concludes that any additional construction is unnecessary.¹

II. “Piston,” “contact surface,” and “piston head”

Claims 1, 10, and 18 of the ’671 patent require “a piston having a contact surface.” ’671 Patent, 56:50, 57:35, 58:24. Claims 13 and 19 of the ’526 patent and claims 1, 15, and 16 of the ’338 patent similarly describe “a piston having a piston head.” ’526 Patent 57:42, 58:17; ’338 Patent 42:66, 44:34-35, 44:47. Claims 1 and 25 of the ’526 patent require “a piston including a piston head.” ’526 Patent 56:64, 58:54. According to Baxter, these terms describe “a solid device that translates back and forth within a chamber that is attached to or integrally formed with a head.” Pls.’ Br. 11. Fresenius disagrees and argues the proper construction of these terms is “a device that moves back and forth to actuate dialysis fluid” and that the remaining terms should be left to their plain and ordinary meanings. Defs.’ Br. 8.

During the *Markman* hearing, Baxter narrowed the issues in dispute by agreeing that the piston “moves back and forth” and that it need not move “within a chamber.” *Markman* Hr’g Tr. 53. This then leaves three questions: (1) must the piston be “solid”; (2) must the piston be “attached or integrally formed” to the “piston head”; and (3) is the term “contact surface” synonymous with “piston head”?

¹ In its brief, Baxter also points to expert testimony, but it is inappropriate to resort to such extrinsic evidence when the issues of construction can be resolved from the intrinsic record. *Vitronics*, 90 F.3d at 1583.

As to the first question, it was initially unclear whether by “solid” Baxter meant that the piston must be constructed of some tangible material (rather than of a liquid or a gas), or whether the piston must be constructed of a tangible material *and* not be hollow or have any channels or holes in it. Only at the *Markman* hearing did Baxter clarify that by “solid” it intended to mean the former and not the latter. *Id.* at 54. The intrinsic evidence supports this construction.

Looking at the claim language itself, claim 20 of the '671 patent refers to the “translating shaft” of the piston. '671 Patent 58:41-43. Additionally, claim 1 describes a stepper motor that is “configured to move the piston” ('671 Patent 56:52), while claim 18 notes how piston is “moved away . . . by the stepper motor” (*id.* 58:36-38). From this language, it is apparent that the piston must have a “shaft” and engage with a “stepper motor” and, thus, cannot consist entirely of liquid or gaseous material.

That the piston must be comprised, at least in part, by solid material also is consistent with the specification of the '671 Patent. For example, the '671 Patent discloses that the “pump piston connects to or is integrally formed with the linear actuator.” *Id.* 32:26-27. Again, an entirely gaseous or liquid piston could not connect to a linear actuator. Additionally, Figure 1 is an embodiment of a dialysis system “having a *mechanically* actuated fluid pump.” *Id.* 7:67 (emphasis added). In contrast, Figure 2 is an embodiment of the system “having a *fluidly* actuated fluid pump.” *Id.* 7:3 (emphasis added). The primary difference between the two embodiment is that, unlike the mechanically actuated system in Figure 1, the system in Figure 2 is “completely fluidly actuated and does not use the linear pump actuator” of the Figure 1 system. *Id.* 13:34-37. Comparing the two figures reveals that the principal difference is that Figure 1 includes a piston pump and piston pump motor, which operates to mechanically (rather

than fluidly) actuate the dialysis system. This too supports the construction that a piston is not entirely liquid or gaseous in form.

For its part, Fresenius contends that the patent specification disclose various embodiments where the system is “pneumatically or hydraulically actuated” without a solid piston. *See* Pls.’ Resp. 9 (citing ’671 Patent 36:16-17). But, as Baxter notes, the embodiment upon which Fresenius relies is an alternative embodiment that does not use a piston at all. Accordingly, this argument is unpersuasive.

Based upon the foregoing, the Court construes the term “piston” as “a device, consisting at least in part of solid material, that moves back and forth to actuate dialysis fluid.”

Turning to the second question, Baxter contends that the piston must be “attached or integrally formed” to the piston. Pls.’ Br. 11. In support, it observes that the specification illustrates this structural relationship between a piston and a piston head. *See* Pls.’ Br. 15 (citing ’671 Patent 32:21-22 (noting that the “piston is attached to or integrally formed with a piston head”); *see also* ’671 Patent 10:63-64 (disclosing “an attached piston head”). But the claim language uses the more general words “having” and “including,” neither of which denote any particular structural relationship between the piston and the piston head. *See Bose Corp. v. SDI Techs., Inc.*, 828 F. Supp.2d 415, 423 (D. Mass. 2011) (giving “including” its ordinary and customary meaning). Baxter’s reliance on the specifications improperly reads the disclosed embodiments into the claims. *See Liebel-Flarsheim*, 358 F.3d at 909.

Indeed, construing the words “having” and “including” as they appear in the claims to mean “attached or integrally formed to” – as Baxter suggest – would lead to anomalous results. For example, Baxter would hardly argue that the phrase “a hardware unit *including* a piston” appearing in claim 1 of the ’671 Patent should be read to mean “a hardware unit attached or

integrally formed to a piston.” *See, e.g.*, ’671 Patent 56:50, 57:35, 58:24. Yet it provides no persuasive basis as to why the same word should have different meanings throughout the claims. *See Omega Eng'g, Inc., v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003). What is more, the fact that the inventors specifically described the piston in one embodiment as being “attached to” or “integrally formed with” a piston head in the specification, but used the words “including” and “having” in the claims themselves indicates that they intended the words to have different meanings.² Accordingly, the Court concludes that the clauses “piston having a piston head” and “piston including a piston head” do not require that the piston be attached to or integrally formed with the piston head.

Thirdly, the parties dispute whether the terms “contact surface” and “piston head” have the same meaning. Baxter’s proposed construction conflates the two terms and defines both terms as a “head.” Pls.’ Br. 11. If this were true, however, dependent claims 5 and 12 of the ’671 patent would be superfluous. For example, claim 1 requires “a piston having a contact surface” while claim 5 narrows the scope to “a pumping head of the piston.” ’671 Patent 56:50, 57:14. Likewise, claim 10 describes “a piston having a contact surface” while claim 12 says the contact surface must include a “circular, dome-shaped piston head.” *Id.* 57:35, 58:2-3. By limiting the types of contact surfaces, these dependent clauses indicate under the doctrine of claim differentiation that the term “contact surface” covers more than just the term “piston head.” *Phillips*, 415 F.3d at 1315. The difference between the contact surface and the piston head also is illustrated in the specification. *See* ’671 Patent 32:67-33:4; 33:21-23 (noting that in

² *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295 (Fed. Cir. 1999), is distinguishable and does not require a different result. There, the Court construed “including” as meaning being “permanently affixed to and included as part of.” *Id.* at 1302. But in that case, the court found, *inter alia*, that the specification expressly touted the advantages of the two parts being affixed together. *Id.* at 1301. Here, the specification is silent as to whether employing a piston head that is attached to a piston has any particular advantage over one that is not.

one embodiment only the “outer surface of the piston head” – not the piston head itself – comes in contact with the cassette membrane).

To review, the Court construes “piston” to mean “a device, consisting at least in part of solid material, that moves back and forth to actuate dialysis fluid.”³ The Court construes the terms “having” and “including” to have their plain and ordinary meaning requiring no further construction. Finally, the Court concludes that the terms “contact surface” and “piston head” are not coextensive.

III. “Positioned so as to form a sealed area around the piston and the moveable membrane of the disposable unit”

The phrase “positioned so as to form a sealed area around the piston and the moveable membrane of the disposable unit” appears only in claim 18 of the ’671 patent. ’671 Patent 58:31-33. Baxter believes that no construction is necessary (Defs.’ Br. at 24), but Fresenius proposes that the proper construction is “positioned so that the sealing apparatus forms a seal against both the piston and the moveable membrane of the disposable unit.” Defs.’ Br. 24. Thus the conflict is thus whether the seal must simply form a sealed area around the piston and moveable membrane, or whether the seal must be *against* the piston and moveable membrane.

In support of its construction, Fresenius argues that the use of the word “positioned” indicates ‘a deliberate act of placing or arranging’ and “the spatial proximity” between the sealing apparatus and the piston and moveable membrane. Defs.’ Br. at 22. Certainly, the work “positioned” connotes a “placing or arranging,” but it does nothing to indicate the spatial distance between the sealing apparatus and the piston and moveable membrane. Fresenius also argues that if the word “positioned” does not imply such spatial proximity, then it would be

³ Baxter’s argument that this construction would lead to an “absurd result” by confusing a piston with a moveable membrane is ill-founded. *See* Pls.’ Br. at 12. As Fresenius correctly notes, the claims require a “disposable membrane” having a “moveable membrane” separate and apart from the “piston.”

superfluous. *Id.* However, it is perfectly easy to see how “positioned” could refer to the deliberate placement of the sealing apparatus so as to create a seal *around*, but not *against*, the piston and membrane. As such, Fresenius’ argument is not compelling.

Furthermore, the construction offered by Fresenius would render dependent claim 19 superfluous. Claim 19 claims the system set forth in claim 18 “wherein the [sealing] apparatus is a sealing diaphragm moveable with the piston.” ’671 Patent 58:39-40. In other words, claim 19 describes a system where the sealing apparatus abuts the piston so that it can move with it. To construe the phrase “positioned so as to form a seal around” to mean “positioned so that the sealing apparatus forms a seal against” would render dependent claim 19 redundant. And to the extent that Fresenius cites to Figure 17A of the specification to support its arguments, such an approach impermissibly imports the limitations of the preferred embodiment to the claims themselves. *See Liebel-Flarsheim*, 358 F.3d at 909.

Although the Court does not accept Fresenius’ definition, the term still requires a definition to explain that the seal need not be directly against the piston and membrane. The Court therefore construes the phrase “positioned so as to form a sealed area around the piston and the moveable membrane of the disposable unit” to mean “positioned so as to form a sealed area either against or around the piston and the moveable membrane of the disposable unit.”

IV. “Membrane” and “member”

The term “membrane” appears in claims 1 and 3 of the ’596 patent, claims 1 through 4, 6, 10, 13, 14, and 18 of the ’671 patent, claims 1 through 3, 5, 9, 13, 14, 21, and 25 of the ’526 patent, and claims 1 through 5 and 15 of the ’328 patent. *See* ’595 patent 56:47-64, 57:1-3; ’671 Patent 56:49-57, 57:1-12, 15-18, 34-53;58:4-10, 23-38; ’526 Patent 56-49-67, 57 :1-6, 9-12, 27-30, 41-60, 58:38-41, 59:4-13, 60:1-9; ’338 Patent 42:61-67, 43:1-28, 44:42-43. The term

“member” appears in ’526 patent claims 19, 21, and 22. *See* ’526 Patent 58:16-33, 38-45. Although the parties agree that in the context of these patents, the terms “membrane” and “member” are synonymous, Baxter proposes that the terms be construed to mean “barrier,” while Fresenius believes the membrane must be “a barrier capable of deforming during pumping.” *See* Pls.’ Br. 5. Accordingly, the gist of this dispute is whether a membrane must be flexible.

The parties previously litigated the meaning of the term “membrane” in a case involving another patent that shares the same specification with the ’595, ’671, and ’526 patents. *See Baxter Healthcare Corp. v. Fresenius Med. Care Holdings, Inc.*, No. C 07-1359 PJH, 2009 WL 330950, at *24-28 (N.D. Cal. Feb. 10, 2009) *aff’d*, 465 F. App’x 955 (Fed. Cir. 2012). There, Judge Hamilton of the Northern District of California adopted Baxter’s position and construed the term “membrane” to mean “barrier” and not “a flexible sheet capable of being deformed under the disclosed pressures.” *See id.* at *28.

Armed with Judge Hamilton’s decision, Baxter contends that the doctrine of collateral estoppel bars Fresenius from relitigating the issue before this Court. Not surprisingly, Fresenius disagrees. In this circuit, application of collateral estoppel requires four elements: “(1) the issue sought to be precluded must be the same as that involved in the prior action, (2) the issue must have been actually litigated, (3) the determination of the issue must have been essential to the final judgment, and (4) the party against whom estoppel is invoked must be fully represented in the prior action.” *La Preferida, Inc. v. Cerveceria Modelo, S.A. de C.V.*, 914 F.2d 900, 906 (7th Cir. 1990) (quoting *Klingman v. Levinson*, 831 F.2d 1292, 1295 (7th Cir. 1987)).

The first element is met because the patents share the same specification, and thus the same usage of the term “membrane.” Pls.’ Br. 7. The second and fourth elements are met because the California case reached a verdict in favor of Fresenius on July 28, 2010, and

Fresenius was represented by the same counsel as in this case. (*Id.*) The only element of collateral estoppel disputed by the parties is element three – whether Judge Hamilton’s construction of “membrane” was “essential to the final judgment” in that case. *See La Preferida*, 914 F.2d at 906.

Fresenius argues that the court’s construction of “membrane” could not possibly have been essential in that case, because although its construction was rejected by the court, Fresenius nevertheless prevailed before the jury. Defs.’ Reply Br. 13. In Fresenius’ view, it won the case “despite, not because of” the construction of “membrane. (*Id.*) Baxter, however, believes the construction was essential because Fresenius used the Court’s construction during the trial to convince the jury of non-infringement. *See Markman* Hr’g Tr. 17-19.

Whatever the merits of these arguments, the Court concludes that the doctrine of collateral estoppel does not apply in this case because Fresenius, as the prevailing party, did not have the ability to appeal the adverse claim construction ruling by Judge Hamilton. Even in those instances when a party invoking collateral estoppel has satisfied the four elements noted above, Restatement (Second) of Judgments § 28(1) precludes the doctrine’s application if “[t]he party against whom preclusion is sought could not, as a matter of law, have obtained review of the judgment in the initial action” *Id.* This section of the Restatement has been adopted by the Federal Circuit. *See Jackson Jordan, Inc. v. Plasser Am. Corp.*, 747 F.2d 1567, 1576 (Fed. Cir. 1984). Indeed, in *Jackson Jordan*, the court illustrated the application of §28(1) by describing a hypothetical plaintiff who loses at the claim construction stage, yet wins on the merits on infringement. 747 F.2d at 1577. According to the court, such a plaintiff would not be able to appeal the adverse claim construction ruling, and § 28(1) would bar the use of collateral estoppel

in a subsequent proceeding with respect to the disputed claim. *Id.* at 1578. This is the very situation the parties find themselves here, and thus collateral estoppel does not apply.

Turning then to the parties' substantive arguments, the intrinsic evidence support's Baxter's contention that the term "membrane" may be, but need not be, flexible in nature. At various points, the claims in the patents at issue contain references to "flexible membranes" and "moveable membranes." *See, e.g.*, '671 Patent 56:60 ("moveable membrane"); '595 Patent 57:7 ("flexible membrane"). At others, the claims only reference "membranes" without the adjective modifier. *See, e.g.*, '671 Patent 58:13 (differentiating between a "first" membrane that is "shaped-conformed" and a "second membrane"); '526 Patent 56:57 (referring to "first and second fluid receiving membranes"). Thus, where the inventors intended to denote a "flexible" or "moveable" membrane, they did so explicitly by adding a modifier to the term "membrane." To construe "membrane" itself as being flexible would render those modifiers surplusage and be contrary to the syntax of the claims. *See Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562 (Fed. Cir. 1991) (claims should not be construed in a manner that would render terms superfluous); *Electa Instrument S.A. v. O.U.R. Science Int'l, Inc.*, 214 F.3d 1302, 1306-07 (Fed. Cir. 2000) (same). *See also Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1373 (Fed. Cir. 2006) (limiting adjective should not be read into the noun it modifies).

The doctrine of claim differentiation also supports the construction urged by Baxter. For example, as Baxter points out, claim 1 of the '526 Patent requires a disposable unit that includes "first and second fluid receiving membranes." '526 Patent 56:56-57. Claim 2, a dependent claim more limited than claim 1, states that "at least one of the first and second membranes is a flexible membrane." *Id.* 57:1-3. It is well-established that "each claim in a patent is presumptively different in scope." *RF Del., Inc.*, 326 F.3d at 1263. Because the limitation that a

membrane be a flexible one appears in the dependent claim, but not in the independent claim, the law presumes that the term “membrane” as it appears in the independent claim is not so limited. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007).

Fresenius’ argument that a “membrane” must be flexible is based entirely on embodiments contained within the specification. *See* Defs.’ Br. 15-22. However, every example cited by Fresenius is preceded by the words “for example” or similar language indicating the inventors did not intend to limit the invention to the particular embodiment, and the Court finds no persuasive basis to read the limitations of the specification into the claims.

Conclusion

For the foregoing reasons, the four disputed claim terms are construed as set forth in this Memorandum Opinion and Order and Appendix I.

IT IS SO ORDERED

ENTERED: 1/5/15



JOHN Z. LEE
United States District Judge

APPENDIX I

Terms as Construed

#	Term	Construction
I	“A pneumatic source for supplying a negative pressure” “At least one vacuum source operable to apply a vacuum” “A vacuum source pneumatically connected to a vacuum chamber”	The terms “pneumatic source” and “vacuum source,” as well as the remaining words in the disputed phrases, are commonly understood by one with ordinary skill in the art and require no construction.
II	“A piston having a contact surface” “A piston having a piston head” “A piston including a piston head”	“Piston” means “a device, consisting at least in part of solid material, that moves back and forth to actuate dialysis fluid.” The terms “having” and “including” are not limited to mean “being attached to or integrally formed with.” The terms “contact surface” and “piston head” are not synonymous.
III	“Positioned so as to form a sealed area around the piston and the moveable membrane of the disposable unit”	“Positioned so as to form a sealed area either against or around the piston and the moveable membrane of the disposable unit.”
IV	“Membrane” “Member”	“Barrier”