

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SYNQOR, INC.,	§	
Plaintiff	§	
v.	§	No. 2:14CV286
	§	
CISCO SYSTEMS, INC.,	§	
Defendant	§	

MEMORANDUM OPINION AND ORDER

The above-referenced case was referred to the undersigned United States Magistrate Judge for pre-trial purposes in accordance with 28 U.S.C. § 636. Before the Court are Plaintiff’s Supplemental Claim Construction Brief (Docket Entry #72), Defendants’ Response (Docket Entry #79), Plaintiff’s Reply (Docket Entry #81), and Defendants’ Surreply (Docket Entry #82).

I. BACKGROUND

Plaintiff filed suit on January 28, 2011, alleging infringement of six patents-in-suit: U.S. Patent Nos. 7,072,190 (“‘190 Patent”), 7,269,034 (“‘034 Patent”), 7,272,021 (“‘021 Patent”), 7,558,083 (“‘083 Patent”), 7,564,702 (“‘702 Patent”) and 8,023,290 (“‘290 Patent”). All of the patents contain disputed claim terms except for the ‘034 Patent for which there are no disputed claim terms.

The patents are all related. All of the patents except for the ‘021 Patent have a continuation and divisional chain to a common parent application. These continuation/divisional patents have similar, though not identical, specifications and reference is generally made herein to the ‘190 Patent. The ‘021 Patent is a continuation-in-part patent having a differing specification that claims priority at least in part through a variety of applications to the common parent application.

The '190 Patent, '034 Patent, '021 Patent, '083 Patent, and '702 Patent were the subject of a prior suit brought by SynQor against a different set of defendants, *SynQor, Inc. v. Artesyn Techs., Inc., et al.*, Case No. 2:07-cv-497-TJW-CE (“‘497 case”). In the ‘497 case, a claim construction order was issued on July 26, 2010. ‘497 case, Docket Entry # 474 (“‘497 Order”). The Federal Circuit affirmed the trial court findings that the patents were valid and infringed. *SynQor, Inc. v. Artesyn Techs., Inc., et al.*, 709 F.3d 1365 (Fed. Cir. 2013). A number of reexamination proceedings have taken place for the patents-in-suit subsequent to the ‘497 Order.

On January 2, 2014, this Court construed a number of terms in the patents-in-suit. *See generally* Docket Entry #4; *see also* Docket Entry #67. Cisco asserts that SynQor had previously asserted ‘190 Patent Claim 28 only against products incorporating unregulated or semi-regulated bus converters. (Docket Entry #72 at 3). Accordingly, Cisco did not seek clarification of “isolation stage” in Claim 28. (Docket Entry #72 at 3). On April 23, 2014, the Court allowed SynQor to amend its infringement claim to assert Claim 28 against Cisco parts containing regulated converters, as well as unregulated and semi-regulated bus converters (Docket Entry #72 at 2).

As the term is now contested, Cisco filed an Unopposed Motion for Supplemental Briefing Regarding Construction of Claim 28, which the Court granted on April 30, 2014. Cisco submitted an opening claim construction brief on May 8th, 2014, to which SynQor responded on May 22, 2014. On May 29, 2014, Cisco submitted their reply brief, and SynQor responded with a surreply brief on June 5, 2014.

Claim 27 of the ‘190 Patent, from which Claim 28 depends, is reproduced below:

A power converter system comprising:

a DC power source;

an isolation stage comprising:

a primary transformer winding circuit having at least one primary winding connected to the source; and

a secondary transformer winding circuit having at least one secondary winding coupled to the at least one primary winding; and plural controlled rectifiers, each having a parallel uncontrolled rectifier and each connected to a secondary winding, each controlled rectifier being turned on and off in synchronization with the voltage waveform across a primary winding to provide an output voltage whose value drops with increasing current flow through the isolation stage; and

a plurality of non-isolating regulation stages, each receiving the output of the isolation stage and regulating a regulation stage output.

Claim 28 of the '190 Patent is reproduced below:

A power converter system as claimed in claim 27 wherein each primary winding has a voltage waveform with a fixed duty cycle and transition times which are short relative to the on-state and off-state times of the controlled rectifiers.

Claim 29 of the '190 Patent is reproduced below:

A power converter system as claimed in claim 27 wherein the isolation stage is non-regulating.

II. LEGAL PRINCIPLES

The claims of a patent define the invention to which the patentee is entitled the right to exclude. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). Claim terms are given their ordinary and customary meaning to one of ordinary skill in the art at the time of the invention, unless there is clear evidence in the patent's specification or prosecution history that the patentee intended a different meaning. *Phillips*, 415 F.3d at 1312-13. Claim construction is informed by the intrinsic evidence: the patents' specification and file histories. *Id.* at 1315-17. Courts may also consider evidence such as dictionary definitions and treatises to aid in determining the ordinary and customary meaning of claim terms. *Phillips*, 415 F.3d at 1322. Further, "[o]ther claims, asserted and unasserted, can provide additional instruction

because ‘terms are normally used consistently throughout the patent.’” *SmartPhone Techs. LLC v. Research in Motion Corp.*, No. 6:10-CV-74-LED-JDL, 2012 WL 489112, at *2 (E.D. Tex. Feb. 13, 2012) (citing *Phillips*, 415 F.3d at 1314). “Differences among claims, such as additional limitations in dependent claims, can provide further guidance.” *Id.*

A court should “avoid the danger of reading limitations from the specification into the claim.” *Phillips*, 415 F.3d at 1323. For example, “although the specification often describes very specific embodiments of the invention, [the Federal Circuit has] repeatedly warned against confining the claims to those embodiments.” *Id.* The Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Id.* This is not only because of the requirements of Section 112 of the Patent Act, but also because “persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.” *Id.* Limitations from the specification should only be read into the claims if the patentee “acted as his own lexicographer and imbued the claim terms with a particular meaning or disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction.” *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003) (citations omitted); *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012).

Similarly, the prosecution history may not be used to infer the intentional narrowing of a claim absent the applicant’s clear disavowal of claim coverage. *Superguide Corp. v. DirecTV Enters.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (citations omitted). “To be given effect, such a disclaimer must be made with reasonable clarity and deliberateness.” *Id.*

Guided by these principles of claim construction, this Court directs its attention to the disputed claim term.

III. CLAIM CONSTRUCTION

The parties have submitted the following disputed term for construction: **“isolation stage.”**

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“A stage that provides isolation.”	“A non-regulating or semi-regulating isolation stage.”

This disputed term appears in ‘190 Patent Claim 28, which is dependent upon Claim 27, and was not addressed in the ‘497 Order. The parties agree that “isolation” means “the absence of an electric path permitting the flow of DC current (other than a de minim[i]s amount) between an input and an output of a circular stage, component, or circuit.” (Docket Entry #4 at 34).

Parties’ Positions

Cisco asserts the claim language supports its construction, as omitting “non-regulating” from “isolation stage” in Claim 27 was intended to distinguish between non-regulating and semi-regulating bus converters. (Docket Entry #81 at 2). Cisco cites SynQor’s proposed construction of Claim 27, which actually contains the “isolating stage” language in the ‘497 case. *Id.* Cisco also contends that SynQor asserted the same to the Patent and Trademark Office. (*Id.*)

Cisco further asserts the “fixed duty cycle” language of Claim 28 precludes a regulated bus converter. (Docket Entry #72 at 4). Cisco cites the claim language in Claim 27, which requires “an isolation stage... having at least one primary winding,” and Claim 28, which requires “each primary winding has a voltage waveform which has a fixed duty cycle.” *Id.* Both parties agree a “fixed duty cycle” is “a duty cycle that is not varied to control the output voltage

towards a predefined value.” *Id.* Cisco points out that “[c]ontrolling an output towards a predefined value” is “regulating” and “[n]ot controlling an output towards a predefined value” is “non-regulating.” *Id.* Accordingly, Cisco claims the isolation stage of Claim 28 precludes regulation. It argues the patent precludes regulation when the duty cycle is fixed, as “regulation is by control of the duty cycle.” (Docket Entry #81 at 5). Cisco asserts this precludes regulation by any other means. *Id.*

Cisco also asserts SynQor’s previous position is Claim 28 does not apply to regulated bus converters. (Docket Entry #72 at 5). Cisco references comments by the inventor of the ‘190 Patent confirming that the duty cycle is fixed. *Id.* (quoting Ex. 8 at 6; Ex. 1 at 11:10-13, 13:9-15, 15:7-19).

It contends that SynQor’s position before the PTAB during prosecution and reexamination is inconsistent with a construction of isolation stage that includes regulated converters. *Id.* at 6-9. According to Cisco, SynQor stated down-converting voltage occurred “through an isolating stage without regulation.” *Id.* at 6. Cisco highlights the Patent Examiner’s statement of reasons for allowance with respect to a “non-regulating isolation stage” as critical to the patent’s issuance. *Id.* at 6-7. Cisco argues that SynQor made no statement before the Patent Office that the ‘190 Patent covered regulated bus architectures. *Id.* at 7-8.

Finally, Cisco asserts judicial estoppel precludes SynQor’s construction, as SynQor failed to assert regulated converters of infringing in the related ‘497 case. *Id.* at 9. According to Cisco, SynQor distinguished the bus converters of Claim 27 from regulated converters. *Id.* Cisco argues SynQor should be limited by the construction asserted in the ‘497 case, in which SynQor excluded regulated converters from Claim 27. *Id.* at 10. It also cites extrinsic evidence from the ‘497 case to support its claims. Cisco argues SynQor’s proposed construction in the ‘497 case

precludes regulated converters because Claim 27 requires an “output voltage whose value drops with increasing current flow through the isolation stage.” (Docket Entry #81 at 1). It alleges SynQor’s own claim construction brief stated that phrase limits the patent to non-regulated and semi-regulated converters. *Id.*

In its briefs, SynQor asserts its proposed construction is the ordinary meaning of the term and is supported by the claim language and the specification. (Docket Entry #79 at 1). SynQor also argues Cisco never contested SynQor’s construction conforms with the ordinary meaning. (Docket Entry #82 at 2). SynQor further contends that Cisco’s construction fails to conform to the claim language or specification. (Docket Entry #79 at 1). According to SynQor, Cisco relies too heavily on statements during prosecution and reexamination, and none of these statements qualify as a clear and unambiguous disavowal, which is required for claim construction limitation. *Id.*

SynQor also notes the context does not support additional limitation on “isolation stage.” *Id.* at 2. Because Claim 27 does not explicitly mention non-regulation or semi-regulation as Claims 1, 20, and 29 do, SynQor asserts “isolation stage” should not be so limited. (Docket Entry #79 at 3; Docket Entry #82 at 2). SynQor also quotes Judge Ward’s Claim Construction Order in the ‘497 case which stated limitations on “isolation stage” were done expressly; therefore the lack of express requirement in Claim 28 should not limit the phrase. (Docket Entry #79 at 1).

SynQor also asserts the doctrine of claim differentiation supports their claim construction. *Id.* at 3. According to SynQor, Claim 29, like Claim 28, is dependent upon Claim 27, and Claim 29 explicitly requires “the isolation stage is non-regulating.” *Id.* (quoting Ex. 6 at 19:16-17). According to SynQor, this strongly implies that “isolation stage” is not limited, as “claim differentiation” is “clearly applicable” where the added limitation “is the only meaningful

difference between two claims.” *Id.* (quoting *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001)).

SynQor also asserts Cisco’s argument conflating “fixed duty cycle” and “isolation stage” is erroneous. (Docket Entry #79 at 4; Docket Entry #82 at 2). According to SynQor, “fixed duty cycle” is a different limitation from “isolation stage.” (Docket Entry #79 at 4-5). SynQor notes that some claims including “isolation stage” do not include “fixed duty cycle,” such as Claims 20-27 and Claim 29. *Id.* at 4. Furthermore, SynQor claims that regulation may be done by means alternative to the duty cycle. *Id.* According to SynQor, the ‘190 Patent specification states regulation may be done using the synchronous rectifier MOSFETs. *Id.* at 5-6 (citing Ex. 1 at 13:24-14:35).

SynQor asserts statements during the prosecution history only limit a claim when they constitute a “clear and unmistakable surrender of subject matter.” *Id.* at 4 (quoting *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1342 (Fed. Cir. 2009)). SynQor argues none of the statements made during prosecution were “clear and unmistakable surrender,” necessary for limitations. (Docket Entry #79 at 6-7; Docket Entry #82 at 3). Furthermore, SynQor asserts the statements referenced by Cisco were taken out of context and mischaracterized. (Docket Entry #79 at 7-8). According to SynQor, many of these quotes referencing non-regulated and semi-regulated architectures were not intended to limit claims to those types of architectures, but rather to include the discussed architecture types. (Docket Entry #79 at 8-9; Docket Entry #82 at 3).

SynQor also argues that judicial estoppel is inapt as “isolation stage” was not the contested language in the ‘497 case. (Docket Entry #79 at 9). Additionally, SynQor asserts Judge Ward rejected their construction. *Id.*

Court's Construction

In Claim 27, “isolation stage” is preceded by no limitations pertaining to regulation. (‘190 Patent, 18:62). This stands in contrast to Claims 1 and 20, which both require a “non-regulating isolation stage.” (‘190 Patent, 17:24, 18:31). This strongly implies that “isolation stage” is at least not limited to “non-regulating” converters. Furthermore, Claim 29 requires that the isolation stage is non-regulating. While this requirement may be intended to differentiate from “semi-regulating,” as asserted by Cisco, there is nothing in the claim language to imply “isolation stage” is limited to only non-regulating or semi-regulating architectures. Furthermore, it implies that a “non-regulating” requirement was purposely withheld in Claim 27. Had SynQor intended for isolation stage to be limited to non-regulating and semi-regulating configurations only, the inventor could have limited the claim to those two configurations in Claim 27 as it did to a single configuration in Claims 1 and 20. Accordingly, claim language does not support limitation of “isolation stage.”

Cisco’s argument that a fixed duty cycle precludes a regulated converter is not persuasive. “Isolation stage” is used in Claims 20-27 and 29 without including a fixed duty cycle limitation, indicating those limitations operate independently. The specification also indicates that regulation may be achieved through means other than the duty cycle. Furthermore, the Federal Circuit frowns upon reading limitations into claims based on the specification. *Phillips*, 415 F.3d at 1323. Additionally, the quote Cisco cites is taken out of context and applies to a particular configuration shown in Figure 2, rather than all possible configurations, and thus should not limit Claim 28. Accordingly, “fixed duty cycle” does not limit “isolation stage.”

Despite Cisco’s contention that the ‘190 Patent prosecution history constitutes limitations upon “isolation stage,” these statements are ambiguous and were construed by both parties to

support their constructions. Limitation of the patent claims requires “a clear and unmistakable surrender of subject matter.” *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1342 (Fed. Cir. 2009) (citing *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1251 (Fed. Cir. 2000)). Because SynQor’s previous statements are ambiguous, the prosecution history does not support the assertion of “clear and unmistakable surrender” by SynQor. Accordingly, the prosecution history does not support limitation of “isolation stage” to preclude regulated converters.

The intrinsic evidence thus supports SynQor’s position. Further, the extrinsic evidence cited by Cisco does not overcome the intrinsic record. In the ‘497 case, the arguments related to the term “output voltage whose value drops with increasing current flow.” This term is different and separate from the “isolation stage” that is now before the Court. Also, in the ‘497 case the Court rejected the arguments of the parties and found that the “output voltage whose value drops with increasing current flow” required no further construction. As noted by the court in the ‘497 case, “[w]hen the claims were intended to limit the claims to an isolation stage as being ‘non-regulated,’ the claims do so by expressly using the term ‘non-regulating.’” ‘497 case, Docket Entry # 474 at 36. The voltage drop term remains a limitation of the ‘190 Patent, but it does not change the separate “isolation stage” term. Moreover, the change Cisco seeks to the “isolation stage” may render the voltage drop term superfluous. Cisco’s extrinsic evidence does not overcome the clear language of the claims nor the intrinsic record as a whole.

The Court therefore construes “isolation stage” to have its plain and ordinary meaning.

IT IS SO ORDERED.

SIGNED this 11th day of July, 2014.


CAROLINE M. CRAVEN

10 UNITED STATES MAGISTRATE JUDGE