

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

WSOU INVESTMENTS, LLC D/B/A
BRAZOS LICENSING AND
DEVELOPMENT,

Plaintiff,

v.

XILINX, INC.,

Defendant.

C.A. No. 20-1228-GBW-JLH
(Consolidated)

MEMORANDUM ORDER

In this patent infringement action between Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development (“WSOU” or “Plaintiff”) and Defendant Xilinx, Inc (“Xilinx” or “Defendant”), Magistrate Judge Hall held a *Markman* hearing and issued a Report and Recommendation (D.I. 146, the “Report”) recommending that the Court adopt constructions for nine disputed claim terms in U.S. Patent Nos. 6,784,653 (the “’653 patent”), 7,068,950 (the “’950 patent”), 7,613,938 (the “’938 patent”), and 7,903,971 (the “’971 patent”).¹ Both WSOU and Xilinx filed objections. WSOU objected to four constructions, and Xilinx disputes one construction. D.I. 149 & 150. WSOU and Xilinx responded to each other’s objections. D.I. 153 & 155.

The Court has reviewed the Magistrate Judge’s Report, the objections and the responses thereto, and has considered *de novo* the original claim construction briefing and supporting documents, as well as the transcript of the claim construction hearing. *See, e.g., St. Clair Intellectual Prop. Consultants, Inc. v. Matsushita Elec. Indus. Co.*, 691 F. Supp. 2d 538, 541-42

¹ Docket citations refer to C.A. No. 20-1228, unless otherwise noted.

(D. Del. 2010); 28 U.S.C. § 636(b)(1); FED. R. CIV. P. 72(b)(3). For the reasons set forth below, WSOU and Xilinx's objections to the Report are **OVERRULED** and the recommended constructions are **ADOPTED**.

I. LEGAL STANDARD

"It is a bedrock principle of patent law that 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) (internal quotation marks omitted); *see also Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) ("A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention"). "[T]here is no magic formula or catechism for conducting claim construction." *Phillips*, 415 F.3d at 1324. The Court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.* The ultimate question of the proper construction of a patent is a question of law, although subsidiary fact-finding is sometimes necessary. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996)).

"The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1312–13). A person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1313.

“When construing claim terms, the court first looks to, and primarily rely on, the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent, which is usually dispositive.” *Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc.*, 731 F.3d 1271, 1276 (Fed. Cir. 2013). “Other claims of the patent in question, both asserted and unasserted, can . . . be valuable” in discerning the meaning of a disputed claim term because “claim terms are normally used consistently throughout the patent,” and so, “the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Phillips*, 415 F.3d at 1314. In addition, “[d]ifferences among claims can also be a useful guide[.]” *Id.* For example, “the 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.” *Id.* at 1314-15.

In addition to the claim, the Court should analyze the specification, which “is always highly relevant to the claim construction analysis ... [as] it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs.” *Phillips*, 415 F.3d at 1316. “Even when the specification describes only a single embodiment, [however,] 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.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)). And, the specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

The Court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 980. The prosecution history “can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution[.]” *Phillips*, 415 F.3d at 1317.

In some cases, the Court “will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva*, 135 S. Ct. at 841. Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. Overall, while extrinsic evidence may be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (internal quotation marks and citations omitted).

II. DISCUSSION

a. “directly connected”

The Report recommended construing “directly connected” to mean “connected only by conductors like wires or metal traces.” D.I. 146 at 2, 6-8. WSOU maintains that the connection “may include nonEXOR components that do not materially change the decision circuit’s output.” D.I. 150 at 3. But WSOU’s construction encompasses any number of intermediate components (so long as there is not an EXOR circuit)—a construction contrary to the specification and claim language. *See* ’653 patent at Fig. 3; 2:57-64; 4 cl. 1, 7; D.I. 135-1 ¶ 56. As the Report recognized, “[t]he problem for WSOU is that, ultimately, the scope of the invention is described by the claims; the patentee is not entitled to everything not in the prior art. The patent could have claimed any circuit without an EXOR. The patent could have said in the specification that certain other components could be part of a ‘direct connection.’ It did neither.” D.I. 146 at 8. Accordingly, the

Court, having reviewed the record *de novo*, agrees with the Report's conclusions. WSOU's objection to the construction of "directly connected" is overruled.

- b. **"an analyzer configured (i) to analyze spectral power of an input signal corresponding to the carrier and data signals, the spectral power being in a spectral band corresponding to a spectral null of the input signal, and (ii) to generate a control signal based on the analysis"**

The Report recommended construing the term "analyzer" as a means-plus-function term, the function of which is "(i) to analyze spectral power of an input signal corresponding to the carrier and data signals, the spectral power being in a spectral band corresponding to a spectral null of the input signal, and (ii) to generate a control signal based on the analysis." D.I. 146 at 2, 11. The Report identified the corresponding structure as, "A spectrum analyzer and [an algorithm disclosed in the specification that can perform the claimed second function]." *Id.*

According to WSOU, the Report erred analytically by presuming "analyzer" to be a means-plus-function term, placing the burden upon WSOU to demonstrate otherwise. D.I. 150 at 6-7. But the Report set forth the correct legal analysis: "claims without the word 'means' are presumed not to be means-plus-function" and "that presumption is rebutted if a claim does not recite sufficient structure for performing a claimed function." D.I. 146 at 10 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (internal quotation marks omitted)). The Report then correctly found that Xilinx rebutted the presumption because "[t]he claim recites no structure ... besides the generic term 'analyzer'" to perform the function of "to analyze the power spectrum in a spectral band around a spectral null and generate a control signal based on the analysis." *Id.* at 10-11.

WSOU next argues that the Report erred by requiring "analyzer ..." to meet too high a standard to avoid means-plus-function treatment" because "analyzer" is "a sufficiently definite structural term for a variety of structures with a reasonably well understood meaning in the art."

D.I. 150 at 7 (internal citation and quotation marks omitted). But this Court agrees with the Report's analysis that "the fact that one of skill in the art could program a computer to perform the recited function[] cannot create structure where none otherwise is disclosed," D.I. 146 at 11, as well as its conclusion that "the claim does not recite to one of skill in the art sufficient structure to perform the claimed second function," *id.*, which is "to generate a control signal based on the analysis."

Finally, WSOU contends that the Report erred by concluding that the specification must disclose an algorithm. According to WSOU, no algorithm is required. D.I. 150 at 9. But "[w]hether it's the processor in the spectrum analyzer that generates the control signal or it's a specialized processor, the case law has consistently held that when a mean-plus-function claim requires a computer to perform a specific function, the claim is limited to algorithms disclosed to accomplish that [and their equivalents]. Generating a control signal from the power in a spectral null is a specific function, so the corresponding structure must include an algorithm." D.I. 146 at 12 (citing *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012)) (internal quotation marks omitted). While WSOU seeks to avoid indefiniteness by arguing that, to the extent an algorithm is required, it is disclosed in the specification, D.I. 150 at 9, the Court agrees with the Report's recommendation to defer indefiniteness to summary judgment, D.I. 146 at 12-13.

Accordingly, the Court, having reviewed the record *de novo*, agrees with the Report's conclusions that analyzer should be construed as a means-plus-function term and that the corresponding structure must include at least a spectrum analyzer and an algorithm disclosed in the specification that can perform the claimed second function. The parties may address at summary judgment whether the specification discloses an algorithm sufficient to avoid a finding of indefiniteness. WSOU's objections are overruled.

c. “operable independent of the controller”

The Report recommended construing “operable independent of the controller” to mean “able to operate while the controller is powered down.” D.I. 146 at 17. Xilinx argues that the Report’s construction, which was not advanced by any party,² is contrary to the intrinsic evidence and makes the term redundant and meaningless. D.I. 149. This Court disagrees.

Xilinx’s proposed construction—“[o]perating separately from signals or commands of the controller”—improperly adds a limitation not supported by the claim language or specification. Claim 13 uses the word “operable,” not “operating.”³ The plain and ordinary meaning of “operable” means “able to operate.” As for the specification, when discussing a switch controller (i.e., an “electrical power device”) that is “operable independent of the controller,” the specification states:

In some embodiments, the switch controller is operable independently of the controller for controlling the switch to restore the electrical power to the device. In this arrangement, the switch controller enables electrical power to be restored to the device if the module becomes inoperative, for example, in the event that power is also removed from the controller.

² WSOU argued that no construction was necessary as “operable independent of the controller” could be understood by its plain and ordinary meaning. D.I. 135 at 42.

³ Claim 13 of the ’938 patent recites:

13. A circuit card comprising:

one or more devices,

a controller for controlling operation of the circuit card,

a switch responsive to a command received from the

controller, for causing electrical power to at least one device to be decoupled therefrom for a predetermined period of time, and

an electrical power device, operable independent of the

controller, that causes electrical power to the at least one device and the controller to be restored after the predetermined time period if the electrical power was also decoupled from the controller.

'938 patent at 1:55-60. While Xilinx argues that “being operable when the controller is not powered is only ‘an example’ of being ‘operable independent of the controller’” and thus does not amount to the “actual meaning or scope of this term,” D.I. 149 at 6, the specification supports the notion that the controller being powered down is a situation in which the claimed electrical power device must be able to operate to be “independent of the controller.” '938 patent at 1:55-60. As a result, “Claim 13 does not expressly require the ‘electrical power device’ to independently power down any device—in claim 13 the ‘controller’ and the ‘switch’ power devices down then the ‘electrical power device’ may re-power them after a predetermined period.” D.I. 146 at 17. Although Xilinx argues that the Report’s construction renders subsequent claim language surplusage, D.I. 149 at 7, “operable independent of the controller” informs a person of ordinary skill in the art about the operability of the circuit card as claimed—that is, that the electrical power is still capable of operating even though the controller’s power is decoupled.

Finally, although Xilinx argues that the prosecution history resolves the meaning of “operable independent of the controller” in its favor and argues the Report erred by “seemingly requiring Xilinx to prove disclaimer” (D.I. 149 at 8-9), the cited portions of the prosecution history are not dispositive of the inquiry; neither do they permit Xilinx to add a limitation “not rooted in either the claim language or the specification.” D.I. 146 at 17; *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (noting that the specification is “the single best guide to the meaning of a disputed term.”).

Accordingly, the Court, having reviewed the record *de novo*, agrees with the Report’s conclusions. Xilinx’s objection to the construction of “operable independent of the controller” is overruled.

d. “wherein the plurality of signal states and the number of bits in each sequence are increased”

The Report recommended construing “wherein the plurality of signal states and the number of bits in each sequence are increased” to mean “wherein an increase in the plurality of signal states and the number of bits in each sequence is performed automatically.” D.I. 146 at 2, 19. WSOU objects to importation of a “performed automatically” limitation and corresponding exclusion of manual increases, D.I. 150 at 10. Considering *de novo* the evidence and arguments advanced by the parties, and specifically noting that WSOU (1) offered no evidence to suggest a person of skill in the art would understand the claims to cover manually setting the signaling mode, and (2) did not address Xillinx’s evidence explaining why manual configuration is outside the claim scope, the Court agrees with the Report’s conclusions. D.I. 146 at 18-19. WSOU’s objection to the construction of “wherein the plurality of signal states and the number of bits in each sequence are increased” is overruled.

e. “based on a transmission quality of the optical signal”

The Report recommended construing “based on a transmission quality of the optical signal” to mean “based on analysis and evaluation of a characteristic of the optical signal.” D.I. 146 at 2, 19-20. WSOU objects to the construction as purporting to limit “how the transmission quality is obtained” and argues that “transmission quality might be determined/provided by a separate device or third-party.” D.I. 150 at 11. But WSOU did not brief this argument before the Magistrate Judge, D.I. 135 at 56–57, 58–59, and has not shown good cause for raising new arguments in its objections that it did not present to the Magistrate Judge. *See CoolTVNetwork.com, Inc. v. Blackboard Inc.*, C.A. No. 19-291-LPS-JLH, 2021 WL 2010579, at *1 (D. Del. May 20, 2021) (declining to consider new arguments raised in objections to report and

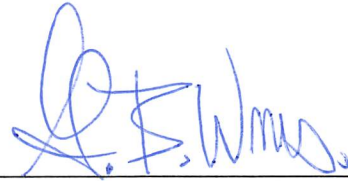
recommendation).⁴ Nevertheless, considering *de novo* the evidence and arguments advanced by the parties, the Court agrees with the Report's conclusions. D.I. 146 at 19-20. WSOU's objection to the construction of "based on a transmission quality of the optical signal" is overruled.

⁴ Neither did WSOU submit the requisite certification pursuant to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72 (Mar. 7, 2022) ("Any party filing objections with a District Judge to a Magistrate Judge's order, ruling or recommended disposition must include, along with the objections, a written statement either certifying that the objections do not raise new legal/factual arguments, or identifies the new arguments and describes the good cause for failing to previously raise the new legal/factual arguments before the Magistrate Judge.").

* * *

NOW THEREFORE, IT IS **HEREBY ORDERED** on November 4, 2022 that:

1. Plaintiff's Objections (D.I. 150) to the Report are **OVERRULED**;
2. Defendant's Objections (D.I. 149) to the Report are **OVERRULED**;
3. The Report is **ADOPTED**; and
4. The parties shall submit for the Court's signature no later than November 9, 2022 a Claim Construction Order consistent with this Memorandum Order and the Magistrate Judge's claim constructions to which the parties did not object.



GREGORY B. WILLIAMS
U.S. DISTRICT JUDGE