

In the United States Court of Federal Claims

No. 15-1307
25 February 2021

CELLCAST TECHNOLOGIES, *
LLC AND ENVISIONIT, LLC, *

Plaintiffs, *

v. *

THE UNITED STATES, *

Defendant, *

and *

INTERNATIONAL BUSINESS *
MACHINES CORP., *

Third-party defendant *

Patent Infringement; RCFC 16(b)(4);
Good Cause; Modification of
Scheduling Order; Amend Infringement
Contentions; Fact Discovery.

Peter J. Chassman, with whom was *Michael Forbes*, Reed Smith LLP, Houston, TX, for plaintiffs.

Joshua Miller, *Walter Brown*, and *Carrie E. Rosato*, Trial Attorneys, with whom were *Joseph H. Hunt*, Assistant Attorney General, and *Gary L. Hausken*, Director, Commercial Litigation Branch, Civil Division, Department of Justice, Washington, DC, for defendant.

Mark Joseph Abate, with whom were *Dietrich Brown*, *Calvin E. Wingfield Jr.*, *Shaun de Lacy*, and *Alexandra D. Valenti*, Goodwin Procter, LLP, New York, NY, for third-party defendant.

OPINION AND ORDER

HOLTE, Judge.

Plaintiffs accuse the government of infringing five United States patents. The government noticed the licensed developers of the technology, International Business Machines Corporation, who join the government in defending the claims of patent infringement. The parties completed fact discovery on 11 May 2018. The Court issued a claim construction order on 26 October 2020.¹ On 11 November 2020, plaintiffs filed an Expedited Motion for Leave to Amend Infringement Contentions, which defendants oppose. For the following reasons, the Court **GRANTS** plaintiffs' Expedited Motion for Leave to Amend Infringement Contentions.

I. Overview

EnvisionIT is the assignee of five United States patents: 7,693,938 (“the ‘938 patent”); 8,103,719 (“the ‘719 patent”); 8,438,221; 8,438,212; and 9,136,954 (collectively, “the asserted patents”). Pls.’ Compl. ¶ 18. CellCast holds an exclusive license to each of the asserted patents. *Id.* ¶ 19. Plaintiffs allege various government agencies infringe the asserted patents, including the Federal Emergency Management Agency, the United States Department of Homeland Security, and the National Oceanic and Atmospheric Administration. *Id.* ¶ 5.

The Integrated Public Alert Warning System (“IPAWS”) is among the technology alleged to infringe the asserted patents. *Id.* ¶ 20. According to the government, International Business Machines (“IBM”) developed IPAWS under a government contract. *See* Gov’t’s Unopp. Mot. to Notice Third Party at 2, ECF No. 10. The government noticed IBM pursuant to Rule 14(b) of the Rules of the United States Court of Federal Claims (“RCFC”) and IBM entered the case. *See generally* IBM’s Ans., ECF No. 21. Hereinafter, the government and IBM are collectively referred to as “defendants,” and IBM, when acting alone, is referred to as “third-party defendant.”

Pursuant to this Court’s 23 February 2018 Order, fact discovery closed on 11 May 2018. *See* Order, ECF No. 92. This case was transferred to the undersigned Judge on 29 July 2019 pursuant to RCFC 40.1(c). *See* Order, ECF No. 149. The Court issued a claim construction order on 26 October 2020, in which the Court adopted defendants’ construction for the term “broadcast message originator/broadcast agent” term and ruled against plaintiffs when finding the disputed terms in claims 1 and 11–13 of the ‘938 patent” were means-plus-function terms. *See* Op. and Order at 21, 47 (“Cl. Constr. Order”), ECF No. 162.

The Court’s claim construction order prompted plaintiffs’ Expedited Motion for Leave to Amend Infringement Contentions (“Pls.’ Mot. for Leave”), ECF No. 163, which is currently pending before the Court.

II. Procedural and Factual History

¹ The Court issued the claim construction order under seal on 26 October 2020 and reissued the Order for publication in its original form on 29 October 2020 after neither party proposed redactions.

On 11 July 2016, the parties submitted a Joint Preliminary Status Report setting forth certain rules and dates for the management of this patent case. *See* Joint Prelim. Status Report, ECF No. 28 (“July 2016 JPSR”). The schedule was modeled in part on the Special Procedures Order for Cases under 28 U.S.C. § 1498(a), which was originally adopted by Senior Judge Damich in *Holmberg v. United States*, No. 14-cv-284 (Fed. Cl. June 10, 2014), ECF No. 7. *Id.* at 10. Pursuant to the 23 February 2018 Order, fact discovery closed on 11 May 2018. *See* Order, ECF No. 92. The parties nevertheless amended the schedule several times. For example, on 26 April 2018 third party defendant amended its Answer without plaintiffs’ opposition. *See* Am. Answer of International Business Machines Corporation, ECF No. 96. In addition, on 13 November 2019, the Court admitted defendants’ amended invalidity contentions after close of fact discovery and reopened fact discovery for defendants as to a third party for good cause. *See* Op. and Order (“November 2019 Order”), ECF No. 155.

The Court issued a claim construction order on 26 October 2020. *See* Cl. Constr. Order. On 30 October 2020, the parties began negotiations on a reduction of asserted claims and amending infringement contentions in view of the Court’s claim construction order. *See* Pls.’ Mot. for Leave at 3. On 11 November 2020, after the parties failed to reach any agreement, plaintiffs filed a motion seeking the Court’s leave to amend infringement contentions. *See id.* at 5. Defendants filed an opposition to plaintiffs’ motion on 18 November 2020, and plaintiffs filed a reply to defendants’ opposition on 20 November 2020. *See* Defs.’ Opp’n to Pls.’ Expedited Mot. for Leave to Amend Infringement Contentions, ECF No. 168 (“Defs.’ Opp’n”); Pls’ Reply in Supp. of Expedited Mot. for Leave to Amend Infringement Contentions, ECF No. 169 (“Pls.’ Reply”).

On 24 November 2020, the Court held a status conference to discuss plaintiffs’ motion and other pending motions in the case. *See* Transcript, ECF No. 171 (“Tr. I”). Despite the Court’s efforts to resolve the disputes between the parties, defendants declined to consent on plaintiffs’ amended contentions and maintained the Court rule on plaintiffs’ motion. *Id.* at 43:11–13. The Court held oral argument on 8 December 2020. *See* Transcript, ECF No. 174 (“Tr. II”). The case is stayed pending resolution of the dispute on plaintiffs’ amended infringement contentions. *See* Order, ECF No. 167.

III. Parties’ Arguments

Plaintiffs contend “[t]he [i]ssuance of a [c]laim [c]onstruction [r]uling [p]rovides [g]ood [c]ause for [a]mendment.” Pls.’ Mot. for Leave at 5. In support, plaintiffs cite local patent rules from numerous district courts. *Id.* For example, Patent Local Rule 3-6 rule of the Northern District of California provides “a finding of good cause [for amendment of infringement contentions] include: (a) A claim construction by the Court different from that proposed by the party seeking amendment.” *Id.* at 6 (citing U.S. District Court for the Northern District of California Patent L.R. 3-6.).

According to plaintiffs, the parties conferred regarding the amended infringement contentions on the following timeline: on 30 October 2020, plaintiffs told defendants plaintiffs wanted to discuss amending the infringement contentions; on 3 November 2020, plaintiffs

provided an exemplary amended infringement contention to defendants; on 8 November 2020, plaintiffs emailed defendants “a complete set of all proposed amendments concerning both the ‘broadcast agent/broadcast message originator’ term and . . . the means-plus-function terms”; and the parties conferred on 9 November 2020 and were unable to reach an agreement. *See id.* at 3–5. Plaintiffs assert the timeline “demonstrates [p]laintiffs’ diligence in amending contentions, putting [d]efendants on notice of them, and discussing them with [d]efendants as soon as reasonably practicable after a short period to digest the Court’s *Markman* Order.” *Id.* at 7.

Plaintiffs further contend the amendments do not prejudice defendants because: (1) “[p]laintiffs’ amended contentions accuse the same aspects of the same infringing IPAWS system as the original infringement contentions”; and (2) “[d]efendants’ opening expert report on invalidity will not depend on [p]laintiffs’ infringement contentions.” *Id.* at 8. Plaintiffs argue “not allowing amendment after claim construction would significantly prejudice plaintiffs.” *Id.* at 8–9 (citing *O2 Micro Int’l, Ltd. v. Monolithic Power Sys.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006) (approving the practice of amending contentions after claim construction because “[i]f a local patent rule required the final identification of infringement and invalidity contentions to occur at the outset of the case, shortly after the pleadings were filed and well before the end of discovery, it might well conflict with the spirit, if not the letter, of the notice pleading and broad discovery regime created by the Federal Rules.”)).

Plaintiffs seek to amend infringement contentions regarding “the broadcast message originator/broadcast agent” terms because the Court’s claim construction order, by construing the term to “require[] submission of a proposed broadcast message by an individual,” did not adopt plaintiffs’ proposed constructions. *Id.* at 9 (quoting Cl. Constr. Order at 20). Plaintiffs previously contended the Collaborative Operating Group (“COG”) itself could be the originator or agent, and now plaintiffs allege “the infringement occurs through the accused system’s use of the combination of both the user name [sic] and the associated COG ID.” *Id.* at 9–10. Plaintiffs also seek to add “specific doctrine of equivalents identification for certain terms relating to the originator or agent where [p]laintiffs’ original contentions pointed to the organization (COG ID).” *Id.* at 10. Plaintiffs argue their proposed amendments do not surprise defendants because “[p]laintiffs’ original contentions . . . included specific references to both the COG ID and the user name [sic],” and “[p]laintiffs’ original contentions included a reservation of rights as to the doctrine of equivalents.” *Id.* at 11.

Plaintiffs also seek to amend infringement contentions regarding the means-plus-function terms, because the Court, contrary to plaintiffs’ proposal, “found [the] presumption [that the terms were not means-plus-function terms] was overcome here and determined that the terms are ‘means-plus-function.’” *Id.* at 11–12. Plaintiffs’ amendments “state for each function identified by the court: the structure in the patent that performs the function, and the corresponding structure in the accused product.” *Id.* at 12. Plaintiffs contend the amendments do not prejudice defendants because defendants had notice of those identified structures from “[p]laintiffs’ Responsive Claim Construction Brief, which cited to the same structure [and] was filed on May 24, 2017, well before the close of fact discovery.” *Id.* Plaintiffs further emphasize their amendments “accuse the same modules within the IPAWS system as in [plaintiffs’] prior contentions.” *Id.* at 13. Thus, as the amendments relate to “the broadcast message

originator/broadcast agent” terms, plaintiffs’ proposed amendments “do not add new accused products or systems, or even new modules within the accused system.” *Id.* at 11.

Plaintiffs’ reply brief suggests the Court should consider *Holmberg v. U.S.*, a decision from this court, in resolving the parties’ current dispute. Pls.’ Reply at 3 (citing No. 1:14-cv-284, Docket No. 85 (Fed. Cl. December 5, 2016)). Regarding the diligence requirement timing, plaintiffs contend the *Holmberg* court “expressly applied a diligence standard that began at the issuance of the court’s claim construction order.” *Id.* at 4 (citing *Holmberg*, No. 1:14-cv-284, Docket No. 85 at n.2 (“As the Court has already held that the Claim Construction Order triggered the new search for prior art by the Defendants, the timetable begins at that point.”)). Plaintiffs also maintain, based on *Holmberg*, parties moving to amend contentions after a claim construction order “need only show that Claim Construction differed from that proposed by the party seeking amendment.” *Id.* (quoting *Holmberg*, No. 1:14-cv-284, Docket No. 85 at *4).

Defendants contend plaintiffs were not diligent in pursuing their proposed amendments. Defs.’ Opp’n at 7. Defendants argue “the proper timeframe for measuring diligence begins with the amending party’s notice of the proposed construction, not the court’s order.” *Id.* (citing *Amgen Inc. v. Sandoz Inc.*, No. 14-cv-04741-RS, 2017 WL 1399077, at *3 (N.D. Cal. Apr. 18, 2017)). Accordingly, defendants argue the “clock [for plaintiffs to show diligence] began running almost four years ago when the parties exchanged proposed constructions in early 2017.” *Id.* at 8.

Defendants urge the Court to adopt Local Patent Rule 3-6(a)(1) from the Eastern District of Texas requiring “[a]mendment[s] . . . [to] be in response to an ‘unexpected or unforeseeable’ claim construction ruling by the Court.” *Id.* at 16 (quoting *Implicit, LLC v. Huawei Techs. USA, Inc.*, No. 6:17-CV-00182-JRG, 2018 WL 11182156, at *4 (E.D. Tex. 2018)). Defendants argue the claim construction order in this case was not “unexpected or unforeseeable” because “the Court adopts a construction proposed by one of the parties, particularly when [the constructions] were proposed *years* before.” *Id.* In particular, regarding the “broadcast agent” / “broadcast message originator” term, the Court adopted defendants’ proposed construction. *Id.* at 3. For the means-plus-function terms “broadcast admission control module” and “broadcast message distributor module,” the Court agreed with defendants the terms are means-plus-function limitations under 35 U.S.C. § 112(f) and adopted plaintiffs’ proposed corresponding structures disclosed in the specification for each recited function. *Id.* Accordingly, defendants maintain “the Court’s order with regard to the means-plus-function limitations of the ’938 patent actually adopted [plaintiffs’] proposed constructions, not [d]efendants’.” *Id.* at 7.

Defendants further contend they “[w]ill [b]e [u]nfairly [p]rejudiced if [plaintiffs are] [p]ermitted to [a]mend [their] [i]nfringement [c]ontentions.” *Id.* at 9. Defendants argue their discovery strategy was based on plaintiffs’ infringement contentions. *Id.* (“Infringement contentions are ‘intended to “shape discovery.”” (quoting *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, No. C 09-5235 MMC (MEJ), 2013 WL 4604206, at *5 (N.D. Cal. Aug. 28, 2013))). Defendants allege plaintiffs’ amended contentions impact “the analysis of the scope of the claims for purposes of both non-infringement and invalidity.” *Id.* at 12. In particular, “[d]uring fact discovery, [d]efendants did not have the benefit of [plaintiffs’] new interpretation of the claim limitation, and therefore did not have the opportunity to pursue

discovery regarding prior art systems as to the newly-accused elements, functions, and structures of IPAWS.” *Id.*

Defendants allege plaintiffs’ proposed amendments “significantly alter [plaintiffs’] infringement theories after fact discovery has already closed.” *Id.* at 10. Regarding the broadcast agent/originator term, plaintiffs amended the alleged component from “‘the COG ID’ and only ‘the COG ID’” to “a *combination* of both the user name [sic] and the *associated* COG ID.” *Id.* For the means-plus-function terms, defendants allege plaintiffs “make new allegations as to the structure for each of the other functions identified by the Court in its *Markman* opinion” which “represent a significant expansion of [plaintiffs’] view of the scope of the claims.” *Id.* at 11.

Defendants object to plaintiffs adding infringement positions under the doctrine of equivalents (“DOE”) based on “a single boilerplate DOE assertion in the cover pleading: ‘Plaintiffs contend that each of the claims identified above is infringed literally and, in the alternative, under the Doctrine of Equivalents.’” *Id.* at 8. Defendants contend “[t]he fact that [plaintiffs] signaled a potential for asserting DOE infringement initially, yet did not provide substantive contentions until this late stage, underscores [plaintiffs’] lack of diligence.” *Id.* at 8–9 (citing *Nike, Inc. v. Adidas Am. Inc.*, 479 F. Supp. 2d 664 (E.D. Tex. 2007) (holding Nike cannot amend its infringement contentions “six months after its initial contentions, and a little over a month prior to the close of discovery” even though Nike included a boilerplate placeholder for its DOE theory in its initial contentions)). Defendants further argue plaintiffs’ proposed DOE contentions prejudice defendants because defendants were deprived the opportunity to “develop[] evidence of the lack of equivalents of the function, way, and result employed in claimed and accused systems during fact discovery.” *Id.* at 14.

IV. Applicable Law

RCFC 16(b)(4) allows modification of a court-imposed schedule “only for good cause and with the judge’s consent.” The good cause standard of RCFC 16(b)(4) mirrors many local district court patent rules for amending contentions. *See Keranos, LLC v. Silicon Storage Tech., Inc.*, 797 F.3d 1025, 1035 (Fed. Cir. 2015) (stating the local patent rules in the Eastern District of Texas only permit amendment to contentions upon a showing of “good cause”), *O2 Micro Int’l, Ltd. v. Monolithic Power Sys.*, 467 F.3d 1355, 1363 (Fed. Cir. 2006) (stating the local patent rules in the Northern District of California allow amendments to contentions only for “good cause”). The law of the Federal Circuit controls for amending invalidity contentions because this issue is “unique to patent cases” and therefore has “a close relationship to enforcement of substantive patent law.” *Id.* at 1365.

If a party shows they acted with the requisite level of diligence in seeking to supplement contentions, prejudice to the opposing party may also be considered. *Id.* at 1368. Prejudice associated with the amendment of invalidity contentions may include “extending discovery,” the need to construe additional claim terms, or any other effects on the construction of claim terms, such as whether the proposed amendments represent a “major change.” *See Kruse Tech. P’ship v. Volkswagen AG*, 544 F. App’x 943, 953 (Fed. Cir. 2013) (“While the parties disagree whether

[plaintiff] sought a major change, it was a change to the theory of infringement that would likely have meant re-opening of *Markman* proceedings and extending discovery.”).

Following the Federal Circuit’s decision in *O2 Micro Int’l*, another judge on this court previously held “both diligence and prejudice are relevant considerations” when interpreting the “good cause” requirement of RCFC 16(b)(4) in the context of amending contentions in a patent infringement case. *MorphoTrust USA, LLC v. United States*, 132 Fed. Cl. 419, 420 (2017). In *MorphoTrust*, the court was asked to decide whether defendants could supplement invalidity contentions after the initial court-ordered deadline. *Id.* at 419. The *MorphoTrust* decision similarly acknowledged the lack of special local patent rules at the Court of Federal Claims and relied upon the Federal Circuit’s decision in *O2 Micro Int’l* when interpreting the “good cause” standard for supplementing invalidity contentions: “[r]elevant to the question of whether good cause exists in this context are both the questions of diligence and prejudice.” *Id.* at 421. Considerations in determining a party’s diligence include additional or unexpected results of discovery, along with the possibility of unanticipated construction of claim terms according to the court’s claim construction order. *Id.* Considerations in weighing prejudice to the party opposing amendment may include the effect of amendments on the construction of claim terms or whether experts have “staked out comprehensive positions with respect to claim construction . . .” *Id.*

V. General Timeline of the Case and Procedural History Relating to Previous Case Scheduling Agreements and Defendants’ Earlier Supplemental Invalidity Contentions

A. Previous Case Scheduling by Parties’ Agreements

On 11 July 2016, the parties submitted a Joint Preliminary Status Report setting forth certain rules and dates for the management of this patent case. *See* July 2016 JPSR. The parties indicated their proposed schedule “utilizes select portions of the Special Procedures Order for Cases under 28 U.S.C. § 1498(a) adopted by Judge Damich, *see, e.g., Holmberg v. United States*, No. 14-cv-284 (Fed. Cl. June 10, 2014), ECF No. 7.” *Id.* at 10. Regarding the contentions (referenced as “claim charts” in the status report), the parties agreed they “may be amended or supplemented after the deadline as discovery progresses upon a timely showing of good cause and absence of unfair prejudice to the opposing party(ies).” *Id.* at 12. The parties also stipulated the contentions should include “[w]hether the alleged infringement is literal or under the doctrine of equivalents,” “whether any claim element governed by § 112(6) is infringed under the doctrine of equivalents,” and “for each element that such party contends is governed by 35 U.S.C. § 112(6), a description of the claimed function of that element and the identity of the structure(s), act(s), or material(s) in the apparatus, product, device, process, method, act or other instrumentality that performs the claimed function.” *Id.* at 12–13.

The previous judge presiding over this case partially granted the parties’ proposed schedule and set fact discovery to close on 15 December 2017. *See* Scheduling Order, ECF No. 33. The un-adopted portion of the parties’ JSPR is not relevant to the present issue. The adopted schedule allows parties to amend or supplement their contentions “after the deadline as discovery progresses upon a timely showing of good cause and absence of unfair prejudice to the opposing

party(ies)” but does not contemplate amending contentions after discovery closes. *See* July 2016 JPSR at 12–13. The parties subsequently extended the deadline for fact discovery to 11 May 2018. While fact discovery was still open, the previous judge held a *Markman* hearing on 13 September 2017. *See* Scheduling Order, ECF No. 71.

B. Defendants’ Earlier Supplemental Invalidity Contentions

On 11 May 2018—the stipulated deadline of fact discovery—defendants served supplemental invalidity contentions to plaintiffs. *See* Pls.’ Mot. to Strike Defs.’ Untimely Suppl. Invalidity Contentions at 3 (“Pls.’ Mot. to Strike”), ECF No. 109. On 25 May 2018, plaintiffs filed a motion to strike defendants’ supplemental invalidity contentions. *See id.* While plaintiffs’ motion to strike was pending, defendants further filed a motion to reopen fact discovery as to a third party on 18 April 2019, which plaintiffs opposed. *See* Defs.’ Mot. to Reopen Fact Disc. as to Non-Party Multi-Technical Systems, Inc. (“Defs.’ Mot. to Reopen Disc.”), ECF No. 142.

This case was transferred to the undersigned Judge on 29 July 2019 with both the claim construction order and the parties’ discovery disputes pending. *See* Order, ECF No. 149. The Court held a status conference on 28 August 2019 to discuss a sequence of ruling on the discovery disputes and issuing a claim construction order. *See* Status Conference Order, ECF No. 151. The status conference was over one year after fact discovery ended and over one year after defendants moved to amend invalidity contentions with newly discovered information and reopen fact discovery related to their amended contentions. *See generally* Pls.’ Mot. to Strike; Defs.’ Mot. to Reopen Disc. Given the delays, the Court suggested issuing a claim construction order before reviewing defendants’ amended contentions and discovery request because the Court believed the claim construction order would inevitably lead to another round of amendments and discovery. *See* Tr. of Proceedings on 28 August 2019, ECF No. 153 (“Tr. of Aug. 2019”), at 8:9–11, 9:9–16. The parties also anticipated the potential need for amendments of contentions and additional discovery after the claim construction order. *Id.* at 15:14–20 (plaintiffs’ counsel: “fact discovery is closed . . . and should remain closed. If we had an odd situation where claim construction necessitated a change, I guess we could . . . figure out whether more discovery was necessary”), 20:9–11 (the government’s counsel: “some district [courts] have [additional review of supplemental invalidity contentions after the *Markman* order] built into the local rules”), 23:6–10 (third party defendant’s counsel: “[s]o I would suggest that . . . we could provide a second contention, a second set of contentions after the *Markman* ruling, and I assume then [p]laintiff [sic] would have to do the same thing on their infringement contentions”). The parties, however, requested the Court rule on the outstanding discovery disputes before issuing a claim construction opinion. *Id.* at 12:21–23 (third party defendant’s counsel: “I would suggest . . . the discovery motions first and then rule on the *Markman*”), 18:2–4 (the government’s counsel: “it would certainly be more efficient to resolve the two outstanding motions prior to issuance of the *Markman* opinion.”), 19:12–14 (plaintiffs’ counsel: “we would think that resolving these two motions prior to the issuance of the *Markman* opinion would be the more efficient”).

At the parties’ request and based on the previously agreed upon agenda, in November 2019 the Court ruled on the motion to amend invalidity contentions and the motion to reopen fact discovery under a standard of whether defendants demonstrated “a timely showing of good cause

and absence of unfair prejudice to the opposing party(ies).” *See* July 2016 JPSR at 12. As defendants demonstrated good cause as to why their supplemental invalidity contentions should be allowed (by satisfying the diligence inquiry) and demonstrated plaintiffs would not be unduly prejudiced by supplementation, the Court permitted defendants to supplement invalidity contentions. *See* November 2019 Order at 10. For the same reason, as defendants demonstrated good cause why limited fact discovery should be reopened (by satisfying the diligence inquiry) and plaintiffs would not be unduly prejudiced, the Court reopened limited fact discovery for defendants. *See id.* at 15.

C. Claim Construction Order

After addressing the November 2019 invalidity contentions and discovery order, the Court turned to the claim construction order. There was further delay, however, due to the *Markman* hearing (and briefing) occurring with a previous judge, the COVID pandemic shutdowns, and remote work transitions beginning in February and March 2020. The Court issued the claim construction order on 26 October 2020. *See* Cl. Constr. Order. This was over three years after the *Markman* hearing, roughly two and half years after the initial close of fact discovery, and eleven months after the Court granted defendants’ motion to amend invalidity contentions and limited reopening of fact discovery.

D. Conclusion of Party Expectations Based on Unique Case Procedure Schedule

Reviewing the 2016 case schedule initially agreed to by all parties demonstrates the parties did not explicitly contemplate amending the contentions after fact discovery closed or the issuance of the claim construction order. *See generally* July 2016 JPSR. Nevertheless, there were no set deadlines for the parties to serve final contentions. *See id;* *see also* Tr. of Aug. 2019 at 23:2–4 (third party defendant’s counsel: “I would point out that there actually is no date in the JPSR for final [contentions] but just the initial contentions.”). There was therefore no rule the amendments must be completed before the issuance of the claim construction order or the end of fact discovery.

Further, defendants moved to amend invalidity contentions to add a later discovered reference on the day fact discovery closed, which plaintiff opposed. Pls.’ Mot. to Strike at 3. In late 2019, the Court granted defendants’ supplementary contention and reopened limited fact discovery upon defendants’ request. *See* November 2019 Order.

Finally, despite the unusual delay in issuing the claim construction order, all parties seemingly contemplated the delay and future necessity for additional amendments to contentions and reopening of discovery. *See* Tr. of Aug. 2019 at 15:14–20 (plaintiffs’ counsel: “fact discovery is closed . . . and should remain closed. If we had an odd situation where claim construction necessitated a change, I guess we could . . . figure out whether more discovery was necessary.”), 20:8–11 (the government’s counsel: “as to whether [a claim construction order] might necessitate a change to the invalidity contentions, I mean, some districts have that built into the local rules.”), 23:2–10 (third party defendant’s counsel: “there actually is no date in the JPSR for final [contentions] but just the initial contentions. . . . *So I would suggest that . . . we could provide a second contention, a second set of contentions after the Markman ruling, and I*

assume then [p]laintiff [sic] would have to do the same thing on their infringement contentions.”) (emphasis added).

VI. Local Patent Rules From the Court of Federal Claims and Other Jurisdictions

A. RCFC Patent Rules and the *Holmberg* Decision

The Court of Federal Claims did not have patent case management rules in effect when the parties set this case’s schedule. See Rules Committee Note, 2018 Adoption, Appendix J of RCFC. Even if the current rules were in place at case inception, this Court does not have a specific rule governing parties’ contention amendments after claim construction orders issue. Rule 24 of RCFC Appendix J is the relevant rule on “Amendments” which provides “[a] party may amend the Preliminary Disclosure of Infringement Contentions or the Preliminary Disclosure of Invalidity Contentions only by court order upon a showing of good cause.” As discussed in the November 2019 Order admitting defendants’ amended invalidity contentions, the Court adopts a standard for amendments that “mirrors many local district court patent rules for amending contentions.” November 2019 Order at 6 (citing *Keranos, LLC v. Silicon Storage Tech., Inc.*, 797 F.3d 1025, 1035 (Fed. Cir. 2015)). In making the good cause determination, “both diligence and prejudice are relevant considerations.” *Id.* at 7 (quoting *MorphoTrust USA, LLC v. United States*, 132 Fed. Cl. 419, 420 (2017)).

To supplement the lack of local patent rules, in 2016 the parties proposed to follow Judge Damich’s Special Procedures Order for Cases under 28 U.S.C. § 1498(a) in *Holmberg v. United States*, No. 14-cv-284 (Fed. Cl. June 10, 2014) (“Judge Damich’s Special Order”). July 2016 JPSR at 10. Judge Damich’s Special Order does not specifically discuss the scenario of amending contentions after a claim construction order. Coincidentally, however, Judge Damich, resolved an almost-identical dispute in *Holmberg* in late 2016 after the parties in this case agreed to the *Holmberg* procedures. See *Holmberg*, No. 1:14-cv-284, Docket No. 85 (Fed. Cl. Dec. 5, 2016) (“*Holmberg* decision”).

In *Holmberg*, Judge Damich issued a claim construction order on 12 January 2016. *Id.* at 2. After the claim construction order, the parties jointly extended the discovery deadline twice to 3 March 2017. *Id.* On 14 October 2016, defendants filed a motion for leave to amend their invalidity contentions to add new prior art. *Id.* Plaintiffs opposed defendants’ amendments, arguing: (1) “[d]efendants could have uncovered the new references before the invalidity contentions came due in March 2015”; and (2) “there was nothing unexpected or surprising in the Claim Construction Order that differed from [p]laintiff’s previously disclosed positions.” *Id.* at 3 (internal citation omitted). Plaintiff’s arguments were based on *Finisar Corp. v. DirecTV Group, Inc.*, 424 F. Supp. 2d 896 (E.D. Tex 2006).

Judge Damich expressly rejected plaintiff’s reliance on a case from the Eastern District of Texas, noting Northern District of California patent rules governed the case. *Id.* at 3–4 ([T]his Court’s SPO is based on the Local Patent Rules of the Northern District of California, not the Eastern District of Texas. Therefore, if there is discrepancy between the two, as there is in this instance, the Court relies upon the Local Rules of the Northern District of California.”). Applying the California rule, Judge Damich held “[d]efendants need only show that Claim

Construction differed from that proposed by [defendants],” and the timetable for defendants to disclose amendments began at the court’s claim construction order because “the Claim Construction Order triggered the new search for prior art by the [d]efendants.” *Id.* at 4, 5.

Judge Damich issued the *Holmberg* decision after the parties in this case agreed to follow his Special Order; the parties accordingly did not expressly agree to be bound by the later *Holmberg* decision. *See* Tr. II at 26:10–17 (defendants’ counsel disagreeing with the statement “*Holmberg* rules and timing were what essentially governed this case from beginning”). Nevertheless, the parties agreed to follow the Special Order as a primary basis for all case scheduling and repeatedly cite *Holmberg* as exemplary. *See* July 2016 JPSR at 10. Given the *Holmberg* decision dealt with a very similar issue to the one before the Court—a party moving to amend contentions after the claim construction order—the Court finds the *Holmberg* decision instructive. During oral argument, the parties agreed to define the *Holmberg* standard as: the diligence of a party moving to amend contentions after a claim construction order starts to measure from the issuance of the order, and the order need not be “surprising” to allow the amendments. *See* Tr. II at 13:12–17 (plaintiffs’ counsel: “*Holmberg* tells us that to show good cause, you only need to show that the claim construction was different from the one proposed by the party seeking amendment and that diligence was to be measured from the time the *Markman* order issued”), 30:5–11 (defendants’ counsel acquiescing it is correct “Judge Damich’s assessment in [*Holmberg*] concluded that the movant does not need to show that the claim construction order is surprising and that the measurement of diligence starts from the issuance of the claim construction order.”).

B. Local Patent Rules From Other Jurisdictions

Throughout the briefing and during oral argument the parties each reviewed numerous local patent rules from other districts: the Northern District of California; the Eastern District of Texas; and the District of Massachusetts. *See, e.g.*, Pls.’ Mot. for Leave at 6; Defs.’ Opp’n at 16; Tr. II at 14:1–15:6. The relevant portion of the local rules in the Northern District of California provide:

Amendment of the Infringement Contentions or the Invalidity Contentions may be made only by order of the Court upon a timely showing of good cause. Non-exhaustive examples of circumstances that may, absent undue prejudice to the non-moving party, support a finding of good cause include:

(a) A claim construction by the Court different from that proposed by the party seeking amendment.

U.S. District Court for the Northern District of California Patent L.R. 3-6. The local rules in the Eastern District of Texas provide:

If a party claiming patent infringement believes in good faith that the Court’s Claim Construction Ruling so requires, not later than 30 days after service by the Court of its Claim Construction Ruling, that party may serve “Amended Infringement Contentions” without

leave of court that amend its “Infringement Contentions” with respect to the information required by Patent R. 3-1(c) and (d).

U.S. District Court for the Eastern District of Texas P.R. 3-6(a)(1). The local rules in District of Massachusetts provide:

The preliminary patent-related disclosures of subsections (d)(1) and (d)(4) may be amended and supplemented only by leave of court upon a timely showing of good cause. Nonexhaustive examples of circumstances that may, absent undue prejudice to the nonmoving party, support a finding of good cause include:

(A) a claim construction by the court that is different from that proposed by the party seeking amendment within 28 days of the court’s claim construction ruling.

U.S. District Court for the District of Massachusetts L.R. 16.6(d)(5).

In short, all jurisdictions referenced by the parties allow parties to amend infringement contentions after issuance of a claim construction order under certain conditions. The Northern District of California supports the finding of good cause when “[a] claim construction by the Court [is] different from that proposed by the party seeking amendment,” while it requires the amendments must be made with “a timely showing of good cause” “absent undue prejudice to the nonmoving party.” The Eastern District of Texas allows a party to serve amended infringement contentions within 30 days of the court’s claim construction order if the party “believes in good faith that the Court’s Claim Construction Ruling so requires.” The District Court of Massachusetts finds good cause for a moving party to amend and supplement its preliminary contentions after “a claim construction by the court that is different from that proposed by the party seeking amendment within 28 days of the court’s claim construction ruling” “absent undue prejudice to the nonmoving party.”

C. The Standard of Measuring Diligence

There is a split view in other jurisdictions regarding whether a moving party’s diligence should be measured from the issuance of a claim construction order or from service of claim construction briefs. *See, e.g., Holmberg* decision at n.2 (“[T]he split in [the Northern District of California] appears to be over whether the diligence of the moving party should be determined from when it received the non-moving party’s proposed claim constructions versus when the court set forth its claim construction order.”); *Amgen Inc. v. Sandoz Inc.*, No. 14-cv-04741-RS, 2017 WL 1399077, at *3 (N.D. Cal. Apr. 18, 2017) (“[S]ome courts, including the undersigned, have rejected the date-of-disclosure rule and have instead measured diligence from the date of the claim construction order.”); *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, No. C 09-5235 MMC (MEJ), 2013 WL 4604206, at *4 (N.D. Cal. Aug. 28, 2013) (finding defendant was not diligent by informing plaintiff of its intent to amend infringement contentions “nearly two months after the Court’s Claim Construction Order”). Nevertheless, there is no clear rule in any jurisdiction—including the Court of Federal Claims and the RCFC patent rules—that governs the timeframe for measuring a party’s diligence after a claim construction order. In the

Holmberg decision, Judge Damich acknowledged the split view in the Northern District of California and concluded the timetable for a party to disclose amendments in this court began at the court's claim construction order because "the Claim Construction Order triggered the new search for prior art by the [d]efendants." *Holmberg* decision at *5.

Defendants urge the Court to apply a standard of measuring diligence derived from the Eastern District of Texas, where an "[a]mendment . . . must be in response to an 'unexpected or unforeseeable' claim construction ruling by the Court." Defs.' Opp'n at 16 (citing *Implicit, LLC v. Huawei Techs. USA, Inc.*, No. 6:17-CV-00182-JRG, 2018 WL 11182156, at *4 (E.D. Tex. 2018) (internal citation omitted)). The Federal Circuit is silent about the requirement a claim construction order be "unexpected or unforeseeable" before amendments to the contentions are allowed to be made after the order. In the Eastern District of Texas, "[t]raditionally, the Court's adoption of another party's construction alone is not sufficient to support a party's good faith belief it was surprised by the Court's ruling." *Virnetx Inc. v. Cisco Systems, Inc. et al.*, No. 6:10-CV-417, 2012 WL 12546881, at *3 (E.D. Tex. October 22, 2012). Nevertheless, "this rule is not without exception." *Cell & Network Selection LLC v. AT&T Inc.*, No. 6:13-CV-403, 2014 WL 10727108, at n.2 (E.D. Tex. Nov. 10, 2014) (citing *Virnetx*, 2012 WL 12546881, at *5). Some judges in the Eastern District of Texas believe "infringement contentions are not intended to provide a 'forum for litigation of the substantive issues.'" *Id.* at *2 (quoting *Linex Techs., Inc. v. Belkin Int'l, Inc.*, 628 F.Supp.2d 703, 713 (E.D. Tex. Sep. 19, 2008)). In *Cell & Network Selection*, the court allowed plaintiff to amend infringement contentions for two claim terms after the court's claim construction order. *Id.* at *5. For one term, the court's construction was different from both parties' proposals, and for the other term, the court adopted defendants' proposal in its entirety. *Id.* at n.3. The court found not only the parties "proposed very different constructions of [the terms]," but also "the [c]ourt . . . construed those terms quite differently from what [plaintiff] proposed." *Id.* at *3. The court further noted "[plaintiff] was not required to incorporate [d]efendants' contrasting proposed constructions in its infringement contentions prior to those constructions being adopted by the [c]ourt." *Id.*

In addition to the standards for amending contentions in the Eastern District of Texas, another judge on this Court expressly rejected the heightened standard of the Eastern District Court of Texas that "any diligence test requires the [moving party] to show why the Court's Claim Constructions were 'surprising' or greatly different from the constructions proposed by the parties." *Holmberg* decision at *4. Judge Damich held in *Holmberg* "[a party] needs only show that [c]laim [c]onstruction differed from that proposed by the party seeking amendment," as a claim construction order different from a party's proposed claim construction makes it reasonable for the party to "dig deeper than [it] had previously." *Id.* at *4, *5.

VII. Diligence and Prejudice in the Present Case

The parties agree amending contentions in this Court requires "good cause," and "good cause" is established by a showing of the moving party's diligence and no undue prejudice to the other party. Pls.' Mot. for Leave at 8 5 (citing *MorphoTrust USA, LLC v. United States*, 132 Fed. Cl. 419, 420 (2017)); Defs.' Opp'n at 6 2 (citing, e.g., *CellCast Techs., LLC v. United States*, No. 15-1307, 2019 WL 5959571, at *4 (Fed. Cl. Oct. 30, 2019)).

A. Diligence

In *Holmberg*, Judge Damich determined the claim construction order date is the starting point for examination of whether a party was timely in disclosing amended contentions because “the Claim Construction Order triggered the new search for prior art by the Defendants.” *Holmberg* decision at *5. Defendants disagree the outcome of the *Holmberg* Dispute should bind the parties in this case, arguing the scheduling order referencing *Holmberg* “was a unique scheduling order that was negotiated by the parties” prior to the *Holmberg* decision and therefore the parties did not contemplate the effects of the *Holmberg* decision on the present case. Tr. II at 26:10–27:7. In the alternative, defendants argue *Holmberg* supports denying plaintiffs’ amendments because fact discovery was still open when the court in *Holmberg* allowed the amended contentions, while fact discovery in this case has been closed since 2018. Tr. I at 33:1–8. Although it is true the parties agreed to rely on Judge Damich’s Special Order prior to the *Holmberg* decision, *Holmberg* involves similar facts related to a party seeking to amend their contentions following a claim construction order constructing disputed terms adverse to the moving party’s positions. See *Holmberg* decision at *1–*2. The *Holmberg* decision further involved a well-reasoned analysis of whether a party was diligent in seeking amended contentions, considering many of the same local patent rules as the parties cite to the Court in their briefing now. See *id.* at *3–*5 (examining the local patent rules of the Northern District of California and Eastern District of Texas as they apply to the facts of the case). The Court therefore finds *Holmberg* persuasive on the question of when diligence first starts to run and adopts the standard Judge Damich sets out in *Holmberg*: the measurement of diligence starts from a claim construction order that is different from a party’s proposal. See *supra* at Section VI(A); see also *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1323 (Fed. Cir. 2016) (affirming the trial court’s decision allowing defendant to amend invalidity contentions under an abuse of discretion standard).

Third-party defendant agrees plaintiffs are diligent in moving for amendments under the standard for measuring diligence in *Holmberg*:

The Court: But based on the *Holmberg* measure of diligence, Plaintiffs were certainly diligent?
[Counsel for third-party defendant]: I would not oppose that, Your Honor. I would agree with that.

Tr. II at 76:10–13. Four days after receiving the Court’s claim construction order, plaintiffs informed defendants of their intent to amend infringement contentions. See Pls’ Mot. for Leave at 3. During oral argument, third-party defendant’s counsel agreed plaintiffs would be diligent under the standard adopted in *Holmberg* by moving within 4 or 5 days of the claim construction order. See Tr. II at 41:2–7 (third party defendant’s counsel “not disagreeing” the current issue differs from *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, No. C 09-5235 MMC (MEJ), 2013 WL 4604206, at *5 (N.D. Cal. Aug. 28, 2013), as “[t]here was no diligence in [*Power Integrations*] . . . [with] a two-month delay, and here we only had four or five days”).

Plaintiffs’ amendments are related to those terms for which the Court did not adopt plaintiffs’ proposed construction. Plaintiffs seek to amend infringement contentions regarding

“the broadcast message originator/broadcast agent” and the two means-plus-function terms of “broadcast admission control module” and “broadcast message distributor module.” *See* Pls.’ Mot. for Leave at 9, 11. The Court adopted defendants’ construction for “the broadcast message originator/broadcast agent” and rejected plaintiffs’ proposal the two “module” terms are not means-plus-function terms. *See* Cl. Constr. Order at 21, 47. Defendants argue the Court adopted plaintiffs’ construction of the means-plus-function terms because the Court largely adopted plaintiffs’ proposals of the corresponding structure disclosed in the specification for each recited function. Defs.’ Opp’n at 3. In the claim construction order, the Court expressly notes defendants successfully rebutted a legal presumption the terms are not means-plus-function, and the Court accordingly favors defendants’ proposed construction. *See* Cl. Constr. Order at 31 (“Defendants successfully rebut the presumption of § 112(f)’s applicability The Court concludes the claim term ‘broadcast admission control module’ is subject to the provisions of § 112(f).”), 41 (“Defendants successfully rebut § 112(f)’s presumption for the claim term ‘broadcast message distributor module’ The claim term ‘broadcast message distributor module’ is subject to the provisions of § 112(f).”). Accordingly, the Court disagrees with defendants’ argument the claim construction order adopted plaintiffs’ construction of the means-plus-function terms.

Defendants urge the Court to apply a standard that any “[a]mendment . . . must be in response to an ‘unexpected or unforeseeable’ claim construction ruling by the Court” in measuring diligence. Defs.’ Opp’n at 16 (quoting *Implicit, LLC v. Huawei Techs. USA, Inc.*, No. 6:17-CV-00182-JRG, 2018 WL 11182156, at *4 (E.D. Tex. 2018) (internal citation omitted)). As discussed *supra* in Section VI(C), there are disagreements among judges in the Eastern District of Texas regarding such a requirement, and the Federal Circuit has never spoken on this issue. Furthermore, Judge Damich expressly rejected this standard in the *Holmberg* decision. The Federal Circuit views patent local rules as “seek[ing] to balance the right to develop new information in discovery with the need for certainty as to the legal theories.” *O2 Micro Int’l, Ltd. v. Monolithic Power Sys.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006); *see also Kruse Tech. P’ship v. Volkswagen AG*, 544 F. App’x 943, 953 (Fed. Cir. 2013). Judge Damich’s approach in *Holmberg* considers the parties’ right to develop new information as proceedings develop and the need for certainty of legal theories at earlier stages of a case—so a party is only permitted to “dig deeper than they had previously” after a frustrating claim construction order. *Holmberg* decision at *5. During oral argument, defendant agreed “Judge Damich’s assessment in [*Holmberg*] concluded that the movant does not need to show that the claim construction order is surprising.” Tr. II at 30:4–11. Defendants are not able to identify any authority from this Court or the Federal Circuit which mandates “an unexpected or unforeseeable claim construction” for a party to be able to amend contentions, or even authority which explains what makes a claim construction order “unexpected or unforeseeable.” *See* Tr. II at 82:12–18 (When asked if there is a Federal Circuit case that covers the standard for an unexpected or unforeseeable claim construction order, third party defendant’s counsel stated “I’m not aware of one right now.”). Accordingly, the Court finds defendants’ argument plaintiffs must show “an unexpected or unforeseeable claim construction” before leave to amend contentions unpersuasive.

Even though the Court is not adopting the “unexpected or unforeseeable” requirement, it analyzes defendants’ arguments the Court’s claim construction order is not “unexpected or unforeseeable” as defendants claim is required to permit plaintiffs’ amendments. *See* Defs.’

Opp'n at 16. For the two means-plus-function terms, the Court adopted part of defendants' proposal finding the terms are means-plus-function terms with certain functions but rejected defendants' proposal that the structures performing the functions were indefinite. *See* Cl. Constr. Order at 31, 36, 41, 46. The Court instead adopted plaintiffs' proposed corresponding structures with slight modifications, even though plaintiffs insisted the terms are not means-plus-function and proposed the corresponding structures as an alternative construction in response to defendants' indefiniteness argument. *See id.* at 30, 32–34; Tr. II at 46:14–47:5 (third party defendant's counsel noting "the Court largely adopted the [p]laintiff's [sic] position on . . . the structure supporting the function in those claims"). The Court's construction is different from both parties' proposals—the Court relied on portions of defendants' arguments that the terms are means-plus-function, and portions of plaintiffs' arguments for the corresponding structures, creating the Court's own construction. Accordingly, even if the Court analyzes defendants' argument a claim construction order must be "unexpected or unforeseeable" to allow a party to amend contentions under the standard adopted by the Eastern District of Texas, the Court's claim construction for the two mean-plus-functions terms is "unexpected and unforeseeable" for plaintiffs because the construction is different from either party's proposal. For the "broadcast agent/originator" term, the Court adopted defendants' proposed construction in its entirety. Cl. Constr. Order at 21. Similar to *Cell & Network Selection*, the parties in this case "proposed very different constructions of" the "broadcast agent/originator term," and the Court construed the term "quite differently from what [plaintiffs] proposed." *Cell & Network Selection LLC v. AT&T Inc.*, No. 6:13-CV-403, 2014 WL 10727108, at *3 (E.D. Tex. Nov. 10, 2014). Therefore, the Court agrees with the *Cell & Network Selection* court that plaintiffs have good cause to amend contentions in response to such a claim construction order. *Id.* at *4.

Third-party defendant agrees plaintiffs would be timely under the *Holmberg* standard in seeking the amendments by initiating a negotiation with defendants four days after receiving the claim construction order. Tr. II at 76:10–13. The Court finds Judge Damich's reasoning in *Holmberg* persuasive and adopts the standard that the measurement of diligence starts when a court issues a claim construction order different from a party's proposal. Plaintiffs seek amendments to their contentions related to claim terms for which they have received adversarial decisions in the Court's claim construction order and do so on a timeline defendants concede would be timely under *Holmberg*. *See id.* at 46:3–9 (Counsel for third-party defendant noting the Court agreed with defendants the claims were means-plus-function). Plaintiffs therefore satisfy the diligence inquiry of the "good cause" requirement for amending infringement contentions following a claim construction order. *See Mortg. Grader*, 811 F.3d at 1323.

B. Prejudice

1. Prejudice Due to the Delayed Schedule

Defendants allege they will be unfairly prejudiced if plaintiffs are allowed to amend the infringement contentions and object to plaintiffs amending their infringement contentions "after fact discovery has already closed." Defs.' Opp'n. at 9–10. Defendants reject plaintiffs' proposal of an adjustment to the case schedule to cure the prejudice also due to fact discovery being closed. *Id.* at 15 ("[Plaintiffs'] suggestion that a mere adjustment to the schedule can cure any prejudice to [d]efendants may have been true had fact discovery remained open."). The

prejudice alleged by defendants is “the delay in the case, the cost of the additional discovery, and the risk and the time period that’s now elapsed.” Tr. II at 59:9–11.

Defendants contend the *Holmberg* decision supports denying plaintiffs’ amendments because fact discovery was still open in *Holmberg* when the court allowed a party to amend its contentions, whereas in this case fact discovery closed years ago (in May 2018). Tr. I at 33:1–8. During oral argument, defendants agreed if the claim construction opinion issued before 2018, plaintiffs should have been allowed to amend the contentions because there would have been substantially less prejudice or even no prejudice for defendants. Tr. II at 32:3–6 (defendants’ counsel agreeing plaintiffs would be allowed to amend their contentions if the claim construction order came out by the end of 2017 as “[plaintiffs] were diligent and [the parties] were still in discovery”). Similarly, as discussed *supra* in Section V(B), defendants manifested there was no prejudice in seeking to amend contentions in May 2018. Defs.’ Resp. in Opp’n to Pls.’ Mot. to Strike at 11 (“Plaintiffs[] . . . fail to establish that [d]efendants’ supplement causes them undue prejudice.”), ECF No. 118. Accordingly, as of May 2018, when fact discovery already closed, defendants contended the close of fact discovery did not preclude parties from amending contentions. At oral argument, defendants could not articulate an exact timeframe for when plaintiff should no longer have been allowed to amend contentions. *See* Tr. II at 90:25–91:5 (when asked “at what point did it not become okay for [p]laintiffs to move to amend their contentions,” the government’s attorney stated “I haven’t really thought about exactly when a great point would have been.”).

In August 2019, defendants still maintained plaintiffs were not unduly prejudiced by permitting defendants’ amendments of invalidity contentions. *See* Tr. of Aug. 2019 17:3–11 (government counsel: “previously in deciding some of these motions, the Court has found that . . . if blame is to be assigned [for delay], it has to be shared.”). When the Court suggested addressing defendants’ amended invalidity contentions after issuing a claim construction order, defendants told the Court both parties could have “a second set of contentions after the *Markman* ruling” without concern for undue prejudice. *Id.* at 23:2–10 (third party defendant’s counsel: “So I would suggest that . . . we could provide a second contention, a second set of contentions after the *Markman* ruling, and I assume then [p]laintiff [sic] would have to do the same thing on their infringement contentions.”). Accordingly, as of August 2019, even though fact discovery had closed over a year before and the parties anticipated the Court’s claim construction would not be available for another few months, defendants contended there was no undue prejudice in allowing parties to have “a second set of contentions after the *Markman* ruling.” *See id.*

In November 2019, the Court allowed defendants to amend their contentions and reopened fact discovery for defendants, as the Court agreed with defendants doing so would not unduly prejudice plaintiffs. *See* November 2019 Order. Defendants saw no prejudice in November 2019 when the Court favored their request for amendments to their contentions, but now allege the delayed schedule of this case will unfairly prejudice them if plaintiffs are permitted to amend contentions. *See* Tr. of Aug. 2019 at 23:2–10. Thus, the undue prejudice alleged by defendants, if it exists, can only be attributed to the delay of a few months between when the claim construction order was expected to issue in early 2020 and the issuance of claim construction order in October 2020.

According to defendants, allowing a party's amendments would not cause undue prejudice to the other party in May 2018, or in August 2019, or even in November 2019 when the Court allowed defendants' amendments. Defendants even anticipated the need for "a second set of contentions after the *Markman* ruling" during the August 2019 status conference. *Id.* at 23:2–10. Even if the Court agrees with defendants the few-month delay during the pandemic has indeed caused prejudice to the parties, it would be unfair for plaintiffs to bear the blame for such prejudice alone. *See id.* at 17:3–11 (defendants' counsel suggesting "to the extent that there is blame to be assigned for how long this case has been pending . . . it has to be shared").

2. Prejudice Due to the Contents of Plaintiffs' Amendments

Plaintiffs seek to amend infringement contentions for those claim terms for which the Court did not adopt plaintiffs' proposed constructions: for the "broadcast message originator/broadcast agent" term, the Court adopted defendants' proposal in its entirety and construed the term to "require[] submission of a proposed broadcast message by an individual;" for the two means-plus-function terms, the Court agreed with defendants that the terms are means-plus-function and adopted plaintiffs' proposed corresponding structures. Pls.' Mot. for Leave at 9, 11. Defendants contend plaintiffs' proposed amendments "represent a significant expansion of [plaintiffs'] view of the scope of the asserted claims" and defendants were deprived of the opportunity to have full discovery because their scope of discovery was based on plaintiffs' original contentions. Defs.' Opp'n at 10, 14. Plaintiffs argue their proposed amendments do not prejudice defendants because the amendments "accuse the same aspects of the same infringing IPAWS system as the original infringement contentions." Pls.' Mot. for Leave at 8.

Contentions serve a function of notice at the early stages of patent litigation. *O2 Micro Int'l, Ltd. v. Monolithic Power Sys.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006) (approving the practice of amending after claim construction because "[i]f a local patent rule required the final identification of infringement and invalidity contentions to occur at the outset of the case, shortly after the pleadings were filed and well before the end of discovery, it might well conflict with the spirit, if not the letter, of the notice pleading and broad discovery regime created by the Federal Rules"). In their original contentions, plaintiffs provided defendants with notice of the amendments plaintiffs now wish to assert: for the broadcast agent/originator term, plaintiffs cite a portion in the IPAWS system with a broadcast message originator that includes "the logged in user name and COG ID," Exhibit E to Peter J. Chassman Declaration at 64, ECF No. 164 ("Pls.' Contentions");² for the means-plus-function terms, plaintiffs' amendments detail the originally

² Regarding the broadcast agent/originator term, plaintiffs previously contended the COG itself could be the originator or agent, and plaintiffs amend the infringed structure as a combination of a username and associated COG ID in response to the Court's construction requiring the broadcast agent/originator to be "*a person* who submitted a proposed broadcast message." Pl.'s Mot. for Leave at 3 (emphasis added). Claim 23 of the '719 patent recites the limitation "a broadcast originator." On page 64 of plaintiffs' original contention, plaintiffs cite a portion in the IPAWS system allegedly infringing the limitation, in which plaintiffs explain "[a] broadcast message record received by the IPAWS system must identify the broadcast message originator . . . , which must include the logged in user name and COG ID." Pls.' Contentions at 64. Plaintiffs' amendments regarding this limitation, as shown on page 65 of the contentions, repeat plaintiffs' assertion "the IPAWS system associates each broadcast originator (user name [sic]) with a specific COG" and includes an alternative DOE contention. *Id.* at 65. Accordingly, plaintiffs'

identified infringing module into three functions and cite the same infringing element as in the original contention for each function, *id.* at 8, 12;³ for the DOE amendments, plaintiffs’ original contentions include a statement that “[p]laintiffs contend that each of the claims identified above is infringed literally and, in the alternative, under the Doctrine of Equivalents,” and plaintiffs’ amendments seek to expand their original DOE statement included in prior contentions, Defs.’ Opp’n. at 8.⁴ Plaintiffs’ amendments do not unduly prejudice defendants as they are within the scope of their original contentions. *See O2 Micro Int’l*, 467 F.3d at 1366; *Holmberg* decision at *5 (“Claim Construction Order . . . made it reasonable for the [parties] to dig deeper than they had previously with respect to [the contentions].”).

amendments regarding the broadcast agent/originator term are based on their original contentions and do not alter plaintiffs’ infringement positions.

³ Plaintiffs’ amendments regarding the means-plus-function terms are to clarify the corresponding structure in the accused product for each function identified by the Court’s claim construction order. *See* Pl.’s Mot. for Leave at 12. Plaintiffs contend their amendments accuse the same modules within the IPAWS system as in the prior contentions. *Id.* at 13. During oral argument, defendants alleged plaintiffs’ amendments contained newly accused structures. *See* Tr. II at 51:19–22. For example, defendants allege plaintiffs’ amendments on page 12 of the contention includes newly accused structures for the “validating” function of the “admission control module.” *See id.* at 52:19–21, 54:18–20. Plaintiffs contend the amendments simply break down the originally accused device into several parts corresponding to each of the identified structures within the claimed module. *See id.* at 50:20–51:2. Claim 1 of the ‘938 patent recites “a broadcast admission control module configured for” three functions. Plaintiffs’ original contentions cited a system allegedly infringing “a broadcast admission control module configured for receiving . . . , validating . . .” as one limitation within claim 1. Pls.’ Contentions at 6–7. The amendments break down the admission control module into two claim limitations: “a broadcast admission control module configured for receiving . . .” and “a broadcast admission control module configured for validating . . .” *See id.* at 6, 11 (striking out the term “validating . . .” in the left column of page 6 and moving the term to page 11 in a new row). Plaintiffs explain the amendments are in response to the Court determining this limitation is governed by § 112, ¶ 6. *Id.* at 6. On page 8 of the contentions, plaintiffs strike out a paragraph corresponding to the validating function of the admission module, and the same paragraph is moved to page 12 with a minor alteration. *Id.* at 8, 12 (moving a paragraph starting with “[t]he IPAWS system . . . is configured for validating”). Accordingly, plaintiffs’ amendments regarding the means-plus-function terms are based on their original contentions and do not alter plaintiffs’ infringement positions.

⁴ Defendants argue the boiler-plate DOE statement in plaintiffs’ contentions cannot support the later amendments. Defs.’ Opp’n at 8–9 (citing *Nike, Inc. v. Adidas Am. Inc.*, 479 F. Supp. 2d 664 (E.D. Tex. 2007)). During the oral argument, defendants distinguished *Nike* from the current scenario, as in *Nike* the boilerplate DOE language was in the original contention but dropped later in intermediate contentions. Tr. II at 87:17–22. Defendants are not able to identify a case from the Federal Circuit, or even a district court, ruling boilerplate DOE language is insufficient to allow for later amendments. *See id.* at 87:2–88:1. Defendants also relied on *Realtime Data, LLC v. Morgan Stanley*, 554 F. App’x 923 (Fed. Cir. 2014), *Kruse Tech. P’ship v. Volkswagen AG*, 544 F. App’x 943 (Fed. Cir. 2013), and *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, No. C 09-5235 MMC (MEJ), 2013 WL 4604206 (N.D. Cal. Aug. 28, 2013), to argue plaintiffs should not be allowed to amend the DOE contentions based on the place-holder language in original contentions. Defs.’ Opp’n at 14. In *Realtime*, the district court denied plaintiff’s DOE amendments because plaintiff dropped the DOE argument in intermediate contentions and did not seek the court’s leave for the amendments. *See Realtime Data, LLC v. Morgan Stanley*, No. 11 CIV. 6696 KBF, 2012 WL 3158196, at *3 (S.D.N.Y. Aug. 2, 2012), *aff’d*, 554 F. App’x 923. The Federal Circuit affirmed, finding “[t]he district court thus did not abuse its discretion by precluding [plaintiff] from asserting infringement allegations under the doctrine of equivalents.” *Realtime Data, LLC*, 554 F. App’x at 938. In *Kruse*, the Federal Circuit denied plaintiff’s change of its DOE contentions because “it was a change to the theory of infringement that would likely have meant re-opening of *Markman* proceedings and extending discovery.” *Kruse*, 544 F. App’x at 953. In *Power Integrations*, the court denied plaintiff’s amendments after finding a two-month delay in seeking amendments was not diligent. *Power Integrations, Inc.*, 2013 WL 4604206, at *4. Here, plaintiffs do not drop the DOE position in any of their intermediate contentions, plaintiffs are properly seeking the Court’s leave for the amendments, plaintiffs’ amendments do not necessitate reopening claim construction, and the Court finds plaintiffs are diligent in seeking the amendments. Accordingly, the cases cited by defendants are not applicable to the present case.

Defendants’ argument that amendments after claim construction deprive them of the opportunity to conduct full discovery is not supported by the record. During oral argument, when asked if defendants conducted discovery based on notice provided in plaintiffs’ claim construction briefs, defendants stated they incorporated plaintiffs’ proposed claim construction into the scope of fact discovery. Tr. II at 49:19–21 (defendants’ counsel: “I’m not saying we weren’t cognizant of what was in the other side’s construction[] [during discovery]”). Discovery and pre-trial proceedings are a fact-finding process for parties to discover new information, and therefore courts allow parties to supplement their contentions upon a showing of good cause and no undue prejudice to the other side, with new information as the case progresses. *O2 Micro Int’l*, 467 F.3d at 1366 (approving the practice of amending after claim construction because “[i]f a local patent rule required the final identification of infringement and invalidity contentions to occur at the outset of the case, shortly after the pleadings were filed and well before the end of discovery, it might well conflict with the spirit, if not the letter, of the notice pleading and broad discovery regime created by the Federal Rules”); *Kruse Tech. P’ship v. Volkswagen AG*, 544 F. App’x 943, 953 (Fed. Cir. 2013) (“The patent local rules seek to balance the right to develop new information in discovery with the need for certainty as to the legal theories.” (internal citation omitted)).

Since defendants had notice regarding the scope of plaintiffs’ amendments—and should have conducted discovery accordingly—the Court is not persuaded by defendants’ argument they were deprived of full discovery by plaintiffs’ later asserted amendments. *See O2 Micro Int’l*, 467 F.3d at 1366; *see also Holmberg* decision at *5 (“Claim Construction Order . . . made it reasonable for the [parties] to dig deeper than they had previously with respect to [the contentions].”). The Court finds the record demonstrates plaintiffs’ proposed amendments are within the scope of the original infringement contentions. Defendants received notice of plaintiffs’ alleged infringement positions from the original contentions as well as other exchanges, and defendants proceeded with discovery scope based on such notice. Accordingly, the Court finds defendants are not unduly prejudiced by plaintiffs’ proposed amendments. *See O2 Micro Int’l*, 467 F.3d at 1366.

C. Conclusion Regarding Case Procedure Timing and Plaintiffs’ Diligence in Seeking Amended Contentions After Delayed Claim Construction

Plaintiffs have been diligent in seeking amended contentions regarding claim terms for which they received adverse decisions in the claim construction order. Plaintiffs’ amendments did not unfairly surprise defendants, as they were within the scope of original infringement contentions. The prejudice alleged by defendants—if any—is primarily attributed to the unfortunate few-months delay caused by the COVID pandemic in early 2020 and such prejudice can be alleviated by further extending any future deadlines. Accordingly, as detailed *supra* in Sections VII(A) and (B), plaintiffs demonstrate good cause in seeking infringement contention amendments in response to the Court’s claim construction order, and plaintiffs’ amendments shall be permitted. *See Mortg. Grader*, 811 F.3d at 1323.

A patent case’s schedule must consider the complicated interplay between the parties’ contentions, claim construction, and fact discovery. A claim construction order heavily impacts,

if not determines, the scope of the parties' discovery because "[t]he purpose of claim construction is to 'determin[e] the meaning and scope of the patent claims asserted to be infringed.'" *O2 Micro Int'l Ltd. v. Beyond Innovation Technology Co., Ltd.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370 (1996)). Regarding the importance of early claim construction, for comparison, some judges do not open fact discovery until the day after the *Markman* hearing. See Judge Albright's Order Governing Proceedings—Patent Case (available on <https://www.txwd.uscourts.gov/judges-information/standing-orders/>). In the present case, the claim construction order issued three years after the *Markman* hearing due to a myriad of issues—case transfer, the parties' convoluted discovery disputes, and the COVID pandemic. Nevertheless, had the parties contemplated the potential impact of a claim construction order on the scope of discovery, and designed the case schedule accordingly, the parties would not have encountered the current dilemma regarding a claim construction order that leads to the need for reopening fact discovery.⁵ Given lessons learned in the present case, the Court suggests future parties consider case management procedures beginning with claim construction, similar to what other judges require.⁶

The parties' contentions in a patent case primarily serve a notice function. See *O2 Micro Int'l*, 467 F.3d at 1366. Courts require the parties to serve initial contentions and allow them to finetune their positions as more information is uncovered during the discovery proceedings. See

⁵ "Theoretically, claim construction can occur at virtually any point in the case: prior to discovery, pursuant to motions for summary judgment, or following the close of evidence at trial." MANUAL FOR COMPLEX LITIGATION (FOURTH) § 33.223, at 607 (2004). Numerous patent law scholars and courts have reviewed the issue of claim construction timing and noted the benefit of having an early claim construction hearing to narrow the issues and focus discovery to facilitate a more efficient proceeding: "[c]ost-cutter sorts recommended a *Markman* hearing well in advance of trial and before expensive complex case discovery." See Edward Brunet, *Markman Hearings, Summary Judgment, And Judicial Discretion*, 9 LEWIS & CLARK L. REV. 93, 97 (2005). Judge Robert Keeton, former Chair of the Rules Committee of the Judicial Conference, supports early claim construction held before the completion of discovery because it "enable[s] the parties and the court to focus discovery in a way that makes more efficient use of party and court resources as the case proceeds." *Id.* at 113 (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 997 F. Supp. 93, 95 (D. Mass. 1997), *aff'd*, 200 F.3d 795 (Fed. Cir. 1999)); see also *MediaCom Corp. v. Rates Tech., Inc.*, 4 F. Supp. 2d 17, 21 (D. Mass. 1998) ("Questions regarding the construction of patent claims can now safely be addressed in many circumstances prior to the completion of fact discovery, and certainly before trial."). Professor Chisum also notes "[t]he interpretation of a claim sets the framework for litigation of a patent dispute . . ." *Id.* (citing 5A DONALD S. CHISUM, CHISUM ON PATENTS § 18.06[2][a][vii], at 18-1116 (2003)). Some commentators further observe early claim construction hearings may facilitate settlement and reduce litigation cost. See MANUAL FOR COMPLEX LITIGATION (FOURTH) § 33.223, at 608 (2004) (citing *MacNeil Eng'g Co. v. Trisport Ltd.*, 126 F. Supp. 2d 51, 52 (D. Mass. 2001)). *But cf.* William F. Lee & Anita K. Krug, *Still Adjusting to Markman: A Prescription for the Timing of Claim Construction Hearings*, 13 HARV. J.L. & TECH. 55, 86 (1999) (concluding "there is generally one 'right' time for a *Markman* hearing: after all discovery has been completed, at the time the court considers the parties' summary judgment motions"); *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 126 F. Supp. 2d 69, 80 (D. Mass. 2001) (This judge has "consistently taken the procedural approach of conducting the *Markman* hearing at the summary judgment stage of litigation or at the point when discovery has closed and trial is approaching," as "the benefits of so doing range from constitutional concerns arising from conducting such a hearing too soon to efficiency concerns arising from conducting the hearing too late.").

⁶ The Court's suggestion here is not to be read as recommending prohibition of any discovery before the claim construction hearing. Indeed, Judge Albright's default schedule enumerates having expert discovery related to claim construction and indefiniteness before the *Markman* hearing, though general fact discovery does not open until the day after the *Markman* hearing. See Order Governing Proceedings—Patent Case (available on <https://www.txwd.uscourts.gov/judges-information/standing-orders/>).

id.; see also *Kruse Tech. P'ship v. Volkswagen AG*, 544 F. App'x 943, 953 (Fed. Cir. 2013). As reviewed in Section VI(B) *supra*, local patent rules of the Northern District of California, the Eastern District of Texas, and the District of Massachusetts all allow amending contentions after a court's claim construction order upon a showing of "good cause." The Federal Circuit understands trial courts need discretion to control their dockets through implementing local patent rules that strike a balance between the breadth of fact discovery at the onset of litigation and the need for certainty of parties' arguments throughout the litigation process. See *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1323 (Fed. Cir. 2016) (affirming the trial court's decision allowing defendant to amend invalidity contentions under an abuse of discretion standard); see also *Kruse*, 544 F. App'x at 953 ("The patent local rules seek to balance the right to develop new information in discovery with the need for certainty as to the legal theories." (internal citation omitted)). If parties were not regularly allowed to amend contentions after a frustrating claim construction order, they may have early necessity to incorporate the opposing party's contrasting proposed claim constructions within infringement contentions prior to the constructions being considered by the court.⁷ Both plaintiff and defendant would risk unnecessarily broad discovery at the onset of the proceeding, wasting time and resources for all parties as well as the courts.⁸ Accordingly, in addition to deadlines for serving initial contentions, a patent case schedule should contemplate agreement on final contention deadlines after the claim construction order so both parties have opportunity to incorporate final claim constructions within their contentions, and thereafter conduct discovery based on the amended contentions.

VIII. Conclusion

For the reasons set forth above, plaintiffs' Expedited Motion for Leave to Amend Infringement Contentions is hereby **GRANTED**. Plaintiffs are permitted to amend their infringement contentions in the form produced to defendants on 8 November 2020.

On 23 October 2020, plaintiffs requested the Court hold a status conference and later withdrew the request on 26 October 2020. See Mot. for Status Conf., ECF No. 157; Mot. to

⁷ "The court's *Markman* ruling can alter the landscape for a party's infringement or invalidity contentions. Accordingly, . . . it is appropriate to allow limited amendments to a party's infringement or invalidity contentions to account for the *Markman* ruling . . ." PATENT CASE MANAGEMENT JUDICIAL GUIDE (THIRD) §5.1.5 (2016) (citing N.D. Cal. Patent L.R. 3-6).

⁸ Numerous courts and patent law scholars also recognize barring broad discovery until after claim construction is cost-saving in patent infringement lawsuits. See, e.g., Paul Gugliuzza, *Patent Litigation Reform: The Courts, Congress, and the Federal Rules of Civil Procedure*, 95 B.U. L. REV. 279, 292 (2015) ("The claim construction order might definitively resolve the issue of infringement (or, in fewer cases, validity) in the defendant's favor, so barring broader discovery until claim construction is resolved would result in cost savings in those cases."). Some district court judges have found one party's pre-claim construction discovery based on the opposing party's contention "a waste of time and resources," and such discovery "is not required for claims construction." *Bonutti Skeletal Innovations LLC v. Linvatec Corp.*, No. 6:12-CV-1379-ORL-22, 2014 WL 186123, at *4 (M.D. Fla. Jan. 16, 2014) (finding defendant's interrogatory based on plaintiff's contentions is "premature, oppressive and overbroad" before the court's claim construction order); see also *Monsanto Co. v. E.I. Du Pont De Nemours and Co.*, No. 4:09cv00686ERW, 2012 WL 27936, at *2 (E.D. Mo. Jan. 5, 2012) (finding contention interrogatories do not need to be fully answered until discovery is near completion).

Withdraw Mot. for Status Conf., ECF No. 159. The Court hereby **GRANTS** plaintiffs' motion to withdraw the request for a status conference and **STRIKES** ECF No. 157.

On 12 November 2020, the parties jointly moved the Court to extend certain discovery deadlines. *See* Joint Mot. to Modify the Scheduling Order as to Certain Deadlines, ECF No. 166. The Court stayed the motion in view of the parties' dispute regarding plaintiffs' motion to amend infringement contentions. *See* Order, ECF No. 167. As some proposed dates in the parties' joint motion have already passed, the Court now finds the joint motion moot. The parties shall file an updated joint status report on or before **29 March 2021** to propose a schedule for future proceedings.

IT IS SO ORDERED.

s/ Ryan T. Holte
RYAN T. HOLTE
Judge