

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TCO AS,
Petitioner,

v.

NCS MULTISTAGE INC.,
Patent Owner.

PGR2020-00078
Patent 10,465,445 B2

Before JOSIAH C. COCKS, LYNNE H. BROWNE, and
JAMES A. WORTH, *Administrative Patent Judges*.

BROWNE, *Administrative Patent Judge*.

DECISION

Denying Institution of Post-Grant Review
35 U.S.C. § 324

ORDER

Granting Petitioner's Motion to Seal
Granting Joint Motion for Protective Order
37 C.F.R. § 42.54

I. INTRODUCTION

TCO AS (“Petitioner” or “TCO”), on August 5, 2020, filed a Petition to institute post grant review of claims 1–21 and 28–49 of U.S. Patent No. 10,465,445 B2 (Ex. 1001, “the ’445 patent”). Paper 3 (“Pet.”). NCS MULTISTAGE INC. (“Patent Owner” or “NCS”) filed a Preliminary Response to the Petition on November 23, 2020. Paper 10 (“Prelim. Resp.”). Concurrently with the Petition, Petitioner also filed a Motion to Seal Exhibits 1010–1013 and 1015–1023. Paper 2 (“Pet. Mot.”). Subsequent to filing of the Petition, the Petitioner and Patent Owner “(the “Parties”) jointly filed a Motion for Protective Order. Paper 9 (“Joint Mot.”). With prior authorization, on December 15, 2020, Petitioner filed a Preliminary Reply. Paper 12 (“Prelim. Reply”). Also with prior authorization, on December 23, 2020, Patent Owner filed a Preliminary Sur-Reply. Paper 13 (“Prelim. Sur-Reply”).

Having considered the arguments and evidence of record, and for the reasons explained below, we exercise our discretion under 35 U.S.C. § 324(a) and deny institution of post-grant review.

A. Real Parties in Interest

Petitioner indicates that it is the real-party-in-interest. Pet. 2. Patent Owner indicates that it is the real-part-in-interest. Paper 6, 1.

B. Related Matters

Petitioner indicates that the ’445 patent is the subject of *NCS Multistage Inc. v. Nine Energy Service, Inc.*, Case No. 6:20-cv-00277 (W.D. Tex.) (the “Nine litigation”); *NCS Multistage Inc. v. Innovex Downhole Solutions, Inc.*, Case No. 6:20- cv-00280 (W.D. Tex.); *NCS Multistage Inc. v. TCO AS, et al.*, Case No. 6:20-cv-00622 (W.D. Tex.) (*see e.g.*, EX1006-

EX1007) (the “TCO litigation”); *NCS Multistage Inc. v. Allamon Tool Company Inc.*, Case No. 6:20-cv- 00699 (W.D. Tex.); *NCS Multistage Inc. v. Packers Plus Energy Services, Inc., et al.*, Case No. 6-20-cv-00700 (W.D. Tex.); and *NCS Multistage Inc. v. Permian Petrolink, LLC*, Case No. 6:20-cv-00701 (W.D. Tex.). Pet. 2.

The TCO litigation involves the same parties as this proceeding. Patent Owner relies on the Nine litigation in support of its arguments in favor of the exercise of discretion under 35 U.S.C. § 324(a) discussed in Section II.A below. The other four litigations are not relied upon by Patent Owner or further mentioned by Petitioner. Accordingly, we do not discuss them further.

Petitioner concurrently filed a petition requesting post grant review of claims 22–27 and 50–57 of the ’445 patent. PGR2020-00077, Paper 1.

C. The ’445 Patent

The ’445 patent “relates to a method and apparatus for sealing well casings.” Ex. 1001, 1:17–18. Specifically, the method and apparatus “relates to an improved rupture assembly wherein the rupture disc, when installed in the wellbore, can be ruptured by engagement with an impact surface of a tubular once a rupturing force is applied to the disc, such as by hydraulic fluid under pressure.” *Id.* at 2:1–8.

Figure 2 of the ’445 patent is reproduced below:

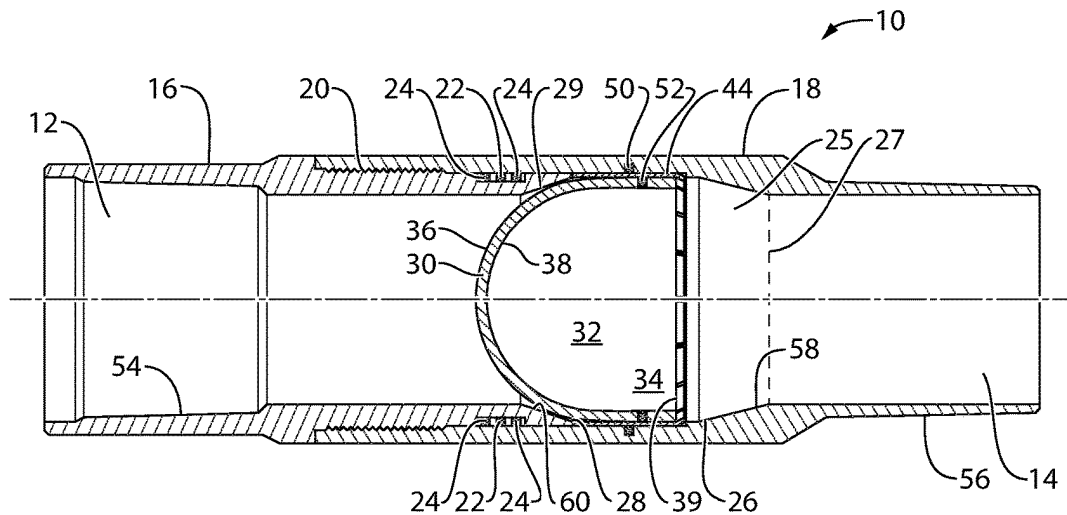


FIG.2

Figure 2 shows a cross-sectional view of rupture disc assembly 10 for installation of a casing string. Ex. 1001, 3:41–43. Rupture disc assembly 10 consists of upper tubular member 16 having upper fluid passageway 12 coupled to lower tubular member 18 having lower fluid passageway 14 formed in its interior to form a continuous fluid passageway. *Id.* at 7:30–37. Rupture disc 30 is sealing engaged between upper tubular member 16 and lower tubular member 18. *Id.* at 7:37–38. The outer wall of lower tubular member 18 overlaps at least a portion of the outer wall of lower tubular member 16 with the tubular members being mechanically joined together at 20 by a threaded connection. *Id.* at 7:40–44. Rupture disc 30 consists of cylindrical portion 34 continuous with hollow, hemispherical dome portion 32. *Id.* at 8:11–12. Portion 32 has concave surface 38 facing down-hole and convex surface 36 facing up-hole and cylindrical portion 34 terminates in circumferential edge 39. *Id.* at 8:8–13.

Rupture disc assembly 30 is used in a method of installing a casing string or to float a casing. Ex. 1001, 5:50–52. Once the casing has landed rupture disc 30 is burst by pressuring the casing from the surface. *Id.* at 6:24–26. After rupture, the inside diameter of the casing string in the region of rupture disc assembly 10 is essentially the same as this in the remainder of the casing. *Id.* at 6:62–65.

C. Illustrative Claim

Petitioner challenges claims 1–21 and 28–49 of the '445 patent. Claims 1 and 28 are independent. Claim 1, reproduced below, is illustrative of the challenged claims.

1. A float tool configured for use in a casing string for a wellbore containing a well fluid, the casing string having an internal diameter that defines a fluid passageway between an upper portion of the casing string and a lower portion of the casing string, the float tool comprising :

a rupture disc assembly comprising (i) a tubular member having an upper end and a lower end, the upper and lower ends configured for connection in-line with the casing string and (ii) a rupture disc having a rupture burst pressure and in sealing engagement with a region of the tubular member within the upper and lower ends,

wherein the rupture disc is configured to rupture when exposed to a rupturing force greater than the rupture burst pressure and the region of the tubular member where the rupture disc is attached has a larger internal diameter than the internal diameter of the casing string and is parallel to the internal diameter of the casing string.

Ex. 1001, 15:26–53.

D. The Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Reference(s)/Basis(s)	35 U.S.C. §	Claim(s) Challenged
Indefiniteness	112(b) ¹	1–21, 29
Written Description	112(a)	1–21, 29
TDP-PO ²	102	1, 28, 29
Rogers ³ , TDP-PO	103	1–3, 8–18, 28–31, 36–46
Entchev ⁴	102	1, 5–7, 19
Entchev	103	28, 29, 33–35, 47
Entchev, Lembcke ⁵	103	4, 32
Entchev, Fishbeck ⁶	103	19–21, 47–49
Rogers, Entchev	103	1–3, 5–19, 28–31, 33–47
Rogers, Entchev, Lembcke	103	4, 32
Rogers, Entchev, Fishbeck	103	19–21, 47–49

Pet. 2–3. Petitioner supports its challenge with the Declaration of Neal Adams, PhD, dated August 5, 2020 (“Adams Declaration”) (Ex. 1002).

¹ Petitioner conflates the challenges based on 35 U.S.C. § 112(a) and § 112(b). We treat these challenges as separate grounds.

² Drawing No. 2005021, Rev. 00 (“TDP-PO”).

³ H.E. Rogers, *Buoyancy Assist Extends Casing Reach in Horizontal Wells*, Society of Petroleum Engineers, SPE 50680, 1998. Ex. 1024 (“Rogers”).

⁴ WO 2010/120774 A1 published Oct. 21, 2010. Ex. 1025 (“Entchev”).

⁵ US 5,526,884, issued June 18, 1996. Ex. 1045 (“Lembcke”).

⁶ US 8,800,660 B2, issued Aug. 12, 2014. Ex. 1031 (“Fishbeck”).

E. Eligibility for Post Grant Review

The post-grant review (“PGR”) provisions of the Leahy-Smith America Invents Act (“AIA”) apply only to patents subject to the first inventor to file provisions of the AIA. AIA § 6(f)(2)(A). Specifically, the first inventor to file provisions apply to any application for patent, and to any patent issuing thereon, that contains or contained at any time a claim to a claimed invention that has an effective filing date on or after March 16, 2013. AIA § 3(n)(1). Furthermore, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent or of the issuance of a reissue patent (as the case may be).” 35 U.S.C. § 321(c); *see also* 37 C.F.R. § 42.202(a) (setting forth the same).

“Petitioner certifies that the ’445 patent is available for Post-Grant Review.” Pet. 4. The ’445 patent was filed on January 31, 2017, and claims priority to a divisional application filed June 28, 2013, which claims priority to a provisional application filed on February 5, 2013. *Id.* at 7; Ex. 1001, codes (22), (60) (identifying domestic priority claims). The Petition was filed on August 5, 2020, which is within nine months of the November 5, 2019, issue date of the ’445 patent. Ex. 1001, code (45).

Petitioner asserts that although the ’445 Patent claims priority to a provisional application which was filed prior to March 16, 2013, it is subject to AIA first inventor to file statutory provisions and, thus, eligible for PGR because it contains at least one claim that is only entitled to a post-AIA effective filing date. Pet. 6. Specifically, Petitioner asserts that claims 7 and 35 lack support in the provisional application for the reasons explained on

pages 7–11 of the Petitioner. Patent Owner does not contest Petitioner’s assertions.

Based on our initial review of Petitioner’s assertions, it appears that the record before us reasonably conveys that claims 7 and 35 are not entitled to the benefit of the filing date of the provisional application, which renders the entire patent subject to AIA first inventor to file statutory provisions. This in turn renders the ’445 patent eligible for post-grant review.

II. ANALYSIS

A. Discretion Under 35 U.S.C. § 324(a)

Patent Owner argues that “[t]he Board should deny institution because each of the factors outlined in the Board’s precedential decision *Apple Inc. v. Fintiv, Inc.*^[7] favors denial in view of the Nine litigation and the TCO litigation, where the Petition grounds are or will be litigated prior to the Board’s final written decisions.” Prelim. Resp. 2. Petitioner disagrees. Prelim. Reply 1.

1. Legal Standards

35 U.S.C. § 324(a) states that

[t]he Director may not authorize a post-grant review to be instituted unless the Director determines that the information presented in the petition filed under section 321, if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.

The portion of the statute reading “[t]he Director may not authorize . . . unless” mirrors the language of 35 U.S.C. § 314(a), which concerns *inter partes* review. This language of sections 314(a) and 324(a) provides the

⁷ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB March 20, 2020) (precedential) (“*Fintiv*”).

Director with discretion to deny institution of a petition. *See Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); Consolidated Trial Practice Guide November 2019 (“TPG”)⁸ at 55.

In exercising the Director’s discretion under 35 U.S.C. §§ 314(a) and 324(a), the Board may consider “events in other proceedings related to the same patent, either at the Office, in district courts, or the ITC.” TPG at 58. The Board’s precedential *NHK Spring* decision explains that the Board may consider the advanced state of a related district court proceeding, among other considerations, as a “factor that weighs in favor of denying the Petition under § 314(a).” *NHK Spring Co., Ltd. v. Intri-Plex Tech., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential).

The Board’s precedential *Fintiv* decision identifies several factors to be considered when analyzing issues related to the Director’s discretion to deny institution, with the goal of balancing efficiency, fairness, and patent quality. *See Fintiv* at 5–6. These factors include: (1) whether a stay exists or is likely to be granted if a proceeding is instituted; (2) proximity of the court’s trial date to the Board’s projected statutory deadline; (3) investment in the parallel proceeding by the court and parties; (4) overlap between issues raised in the petition and in the parallel proceeding; (5) whether the petitioner and the defendant in the parallel proceeding are the same party; and (6) other circumstances and considerations that impact the Board’s exercise of discretion, including the merits. *Id.*

⁸ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

We recognize that *NHK Spring* and *Fintiv* apply the Director’s discretion pursuant to 35 U.S.C. § 314(a) and do not specifically extend their application to 35 U.S.C. § 324(a), which is the relevant statute that applies to this PGR proceeding. As noted above, however, the pertinent statutory language is the same in both section 314(a) and section 324(a). Moreover, the policy justifications associated with the exercise of discretion—inefficiency, duplication of effort, and the risk of inconsistent results—apply equally to post-grant review proceedings under 35 U.S.C.

§ 324(a). Accordingly, we apply the *Fintiv* factors here. *See, e.g., Teva Pharms. USA, Inc. v. Corcept Therapeutics, Inc.*, PGR2019-00048, Paper 19 at 11 (PTAB Nov. 20, 2019) (analyzing *NHK Spring* and instituting trial); *Stripe, Inc. v. Boom! Payments, Inc.*, CBM2020-00002, Paper 22 (PTAB May 19, 2020) (analyzing the *Fintiv* factors and instituting trial); *see also infra* Factor 6 (considering Petitioner’s policy arguments).

2. *Fintiv* Factors

In determining whether to institute trial in this proceeding, we consider each of the factors set forth in *Fintiv* below.

a. *Factor 1: whether a stay exists or is likely to be granted if a proceeding is instituted*

Patent Owner asserts that “[t]o date, neither Nine nor TCO have asked Judge Albright (to whom both cases have been assigned) to stay the district court litigations pending the Board’s review.” Prelim. Resp. 5. Patent Owner asserts further that “[e]ven if Nine or TCO moved for a stay, Judge Albright is likely to deny a stay as he has not yet stayed a single district court litigation pending post-issuance reviews of patents.” *Id.* (citing Ex. 2005). According to Patent Owner “[t]his factor thus weighs towards denying institution.” *Id.*

Noting Patent Owner’s argument that Judge Albright is unlikely to grant a stay, Petitioner argues that “[s]uch generalization should be disregarded as stays in other unrelated cases is not evidence of whether a stay may be granted here.” Prelim. Reply 1 (citing *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative) (“*Fintiv IP*”). Thus, according to Petitioner “this factor is neutral since there are no facts specific to the TCO litigation or Nine litigation that weigh for or against the probability of a stay.” *Id.* at 2.

Our precedential guidance instructs us to consider whether the court has granted a stay of the parallel proceeding, or whether evidence exists that a stay may be granted upon institution. *Fintiv*, Paper 11 at 5–6. As it stands, the record lacks any evidence to suggest that a stay has been granted or may be granted in the future.

For these reasons, we determine that the facts underlying this factor are neutral.

b. Factor 2: proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision

Patent Owner asserts that “[t]he Nine trial, which will address all of TCO’s invalidity challenges, is scheduled for October 2021, four months before the projected FWD date.” Prelim. Sur-Reply 2 (noting that “[t]his trial date was proposed by Judge Albright, and Nine and NCS agreed on it when they filed a joint Scheduling Order.”). Patent Owner further asserts that the TCO litigation is scheduled for March 2022, one month after our projected final written decision due date. Prelim. Sur-Reply 3. In addressing this factor, Petitioner does not dispute that trial in the Nine litigation will address the invalidity challenges that are presented in the Petition. Prelim. Reply 2–4. Rather, Petitioner argues that “[w]hile a trial

date of October 18, 2021 has been proposed in the Nine litigation, that trial date is highly uncertain.” Prelim. Reply 2. According to Petitioner, “trial dates are uncertain given the ongoing global pandemic, particularly given the WDTX has issued a new order each month since March recommending that all trials be continued due to the pandemic.” *Id.* (citing Ex. 1053).

If we institute post-grant review in this proceeding, our Final Written Decision will be due in February of 2022. As noted by both Patent Owner and Petitioner, trial in the Nine litigation is set for October 18, 2021. *See* Ex. 2018. We agree with Patent Owner (*see* Prelim. Sur-Reply 2–4) that Petitioner’s position that the current pandemic may cause further delay is nothing more than speculation untethered to actual evidence in the record. Thus, we conclude that the record before us reasonably establishes that the Nine litigation incorporating “TCO’s Petitions in its invalidity contentions, including the prior art cited under every Ground” will commence approximately four months before our Final Written Decision would be due. Prelim. Resp. 6. Although the TCO litigation is set for a month after our projected due date of the final written decision, we determine that the Nine litigation weighs more heavily toward exercising discretion to deny institution because it will resolve all of the same invalidity issues that are presented in the Petition.

On this record, we determine that the facts underlying this factor weigh in favor of denying institution.

c. Factor 3: investment in the parallel proceeding by the court and the parties

Patent Owner contends that “[i]n the Nine litigation, the parties have expended considerable resources, and that will only continue as the Board considers institution.” Prelim. Resp. 7. Specifically, Patent Owner asserts

that “[a]s of the filing of this paper, the parties in the Nine litigation have exchanged infringement contentions and invalidity contentions and exchanged substantial document productions.” *Id.* at 7–8. In its Preliminary Sur-Reply, Patent Owner updated the progress in the Nine litigation, stating that

Nine served contentions with over 60 prior art references. EX2004. The parties have now fully briefed Markman on 10 terms, proposing constructions for 7 of the 10 terms. *See* EX2014; EX1069. Those briefs concern § 112 invalidity, as Nine alleges 5 terms are indefinite (two of which are at issue in the TCO PGR petitions). The Markman hearing is in three weeks. EX2003 at 2.

Prelim. Sur-Reply 4. We note that the Markman hearing was held January 14, 2021, and the Claim Construction Order issued that same day. Ex. 2017.

Petitioner argues that “[b]y the time of institution, there will be little to no investment in the TCO litigation. At most, only *preliminary* invalidity contentions will have been served on February 8, 2020—twelve days before the institution deadline.” Prelim. Reply 4 (citing Ex. 1066). Petitioner argues further that “[c]laim construction briefing, discovery, expert reports, and substantive motion practice will not be due until well after institution.” *Id.* Turning to the Nine litigation, Petitioner contends that “Nine has only served *preliminary* invalidity contentions; the deadline to serve *final* invalidity contentions, expert reports, and substantive motion practice is *after* the Board will issue its institution decision in this PGR.” *Id.* (citing Ex. 2003). According to Petitioner, “[w]hile the Nine litigation may complete its *Markman* hearing on January 14, 2021 (assuming no COVID-19 or other delays), full fact discovery would have only just commenced on January 21, 2021.” *Id.* at 4–5. Petitioner compares the investment in this

litigation to that in *Sand* where “infringement/invalidity contentions were served, a *Markman* Order was entered, a Motion to Dismiss was heard, the case was transferred, but the Board nevertheless held that ‘much work remains in the district court case as it relates to invalidity.’” *Id.* at 5 (citing *Sand Revolution II, LLC v. Continental Intermodal Group — Trucking LLC*, IPR2019-01393, Paper 24 (PTAB June 16, 2020) (“*Sand*”).

Patent Owner responds that Petitioner’s “citation to *Sand* is inapposite” because in that case “Judge Albright construed only 4 terms and gave them their plain and ordinary meaning. And even then, the Board found this factor weighed in favor of denying institution because the parties expended significant investment in discovery, although not on invalidity.” Prelim. Sur-Reply 4 (citing *Sand* at 10–11; Prelim. Reply 5). Patent Owner argues that “[i]n the Nine case, the parties and Court will have expended significant investment on both issues before the Board decides institution, including on TCO’s allegations of prior art sales/use.” *Id.* at 4–5.

Responding to Petitioner’s contention that in the TCO litigation “it will have spent minimal investment in its invalidity contentions because they are only ‘preliminary,’” Patent Owner argues that “TCO is required to prepare its preliminary contentions in good faith with all the prior art it is aware of to date or risk waiving its ability to fully present its invalidity positions at trial.” Prelim. Sur-Reply 5. Thus, according to Patent Owner, Petitioner “cannot refute the investment that will be wasted post-institution on the invalidity issues should the proceedings move forward in parallel.” *Id.*

As discussed in more detail in Section II.A.2.d below, the Nine litigation involves the same patent, prior art, claims, and arguments as the

TCO litigation. Consequently, Patent Owner's investment in the Nine litigation essentially amounts to investment in the parallel TCO litigation. We agree with Patent Owner that, in the Nine litigation, it and the Court have already expended "considerable resources and that [such expenditures] will only continue as the Board considers institution." Prelim. Resp. 7. We recognize, however, that the investment in the TCO litigation, involving Petitioner, is minimal to date.

Considering the foregoing, the facts underlying this factor weigh slightly in favor of denying institution.

d. Factor 4: overlap between issues raised in the petition and in the parallel proceeding

As noted above, the '445 patent is the subject of the Nine and TCO litigations. According to Patent Owner, the validity challenges presented in this Petition and the related proceeding "are already being litigated before Judge Albright in the U.S. District Court for the Western District of Texas ('WDTX')." Prelim. Resp. 1. Patent Owner asserts that "the Nine and TCO litigations and the Petitions do not just 'substantially overlap', as to the claims asserted in the litigation, they are addressing the exact same invalidity grounds." *Id.* at 9. Specifically, the Patent Owner asserts that

Judge Albright and the Board will simultaneously consider claim construction under the *Phillips* standard and indefiniteness for the same terms, deal with the scope of the same prior art and combinations of art, deal with discovery relating to TCO's alleged prior sale/use and NCS's prior disclosure, weigh that evidence, decide whether TCO's alleged sale/use is legally prior art and meets claim limitations, and decide whether NCS's disclosure of subject matter legally excludes TCO's alleged prior sale/use. Thus, Judge Albright and the Board would be hearing the same exact issues with one significant difference — the

Board likely will have a less complete evidentiary record to make its decision.

Id. (citing *id.* at 11–13). Patent Owner also contends that it will not assert claims 1–13, 16–21, 32–35, 44, 45, and 47–49 against TCO. *Id.* at 9–10. These claims are challenged in the PGR but are not asserted in the TCO litigation. *Id.*

Petitioner responds that “this PGR raises issues that will undeniably not be addressed in the co-pending litigation” because “challenged claims 1–13, 16–21, 32–35, 44, 45, and 47–49 will not be addressed in [that] litigation.” Prelim. Reply 5. Petitioner responds further that Patent Owner’s stipulation “does not negate Petitioner’s interest in claims 1–13, 16–21, 32–35, 44, 45, and 47–49 as NCS did not stipulate against asserting the claims against the other real-parties-in-interest to this PGR or their future customers.” *Id.* Petitioner asserts that “[t]he final invalidity contentions in the Nine litigation [are] not due until after institution and the TCO litigation has not even reached the stage of preliminary infringement/invalidity contentions” and that Patent Owner “will very likely reduce the number of claims asserted at trial meaning this PGR would decide a much larger set of claims and issues than considered at trial.” *Id.* at 5–6 (citing *Google LLC, et al. v. Parus Holdings Inc.*, IPR2020-00846, Paper 9 (PTAB Oct. 21, 2020)).

Patent Owner replies that it “is willing to stipulate that it will not assert those claims against the other real parties-in-interest or their future customers as to the accused TDP-PO product.” Prelim. Sur-Reply 5. Patent Owner replies further that “[p]resumably Nine served its invalidity contentions in good faith and intends to pursue the arguments in litigation. Nine has not amended those contentions and would have to show good cause to do so” and that it “has no intention of doing that, and even if it did, Judge

Albright will still be addressing the same prior art, including TCO's alleged prior sale/use." *Id.* at 6.

Under *Fintiv*, "if the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding, this fact has favored denial" because "concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong." *Fintiv*, 12. Although this Petition involves many claims not involved in the Nine and TCO litigations, Patent Owner's offer to stipulate that it will not assert those claims mitigates Petitioner's concerns.

On this record, we determine that the facts underlying this factor weigh in favor of denying institution.

e. Factor 5: whether the Petitioner and the defendant in the parallel proceeding are the same party

For the Nine litigation, the parties are not the same. Pet. 2; Prelim. Resp. 1. For the TCO litigation, the parties are the same. *Id.* Petitioner asserts that "[u]nder *Fintiv*, if the Petitioner is unrelated to the defendant in an earlier litigation, that fact weighs against discretionary denial" and this is the case for the Nine litigation. Prelim. Reply 6 (citing *Fintiv*, 13–14). Petitioner asserts further that "[w]hile Petitioner is a party to the TCO litigation . . . the TCO litigation is at a nascent stage and will not have a trial before the FWD in this proceeding reducing the weight of the TCO litigation under *Fintiv*." *Id.*

Responding to Petitioner's argument that Nine is an unrelated party and that weighs against discretionary denial, Patent Owner argues "[t]hat is not what *Fintiv* says." Prelim. Sur-Reply 6. Patent Owner quotes *Fintiv* for the proposition that

Even when a petitioner is unrelated to a defendant, however, if the issues are the same as, or substantially similar to, those already or about to be litigated, or other circumstances weigh against redoing the work of another tribunal, the Board may, nonetheless, exercise the authority to deny institution. An unrelated petitioner should, therefore, address any other district court or Federal Circuit proceedings involving the challenged patent to discuss why addressing the same or substantially the same issues would not be duplicative of the prior case even if the petition is brought by a different party.

Id. at 6–7 (quoting *Fintiv*, 14). According to Patent Owner, Petitioner “did not do what the *Fintiv* case instructed it to do—address why the Nine litigation and the TCO litigation would not be entirely duplicative” because “[t]hose cases are entirely duplicative of this proceeding and the Nine case will finish long before a FWD.” *Id.*

The considerations raised by Patent Owner are relevant to, and were taken into account in, our analysis of Factor 4 above. Because Petitioner is not a party to the Nine litigation, we find this factor weighs against denying institution.

f. Factor 6: other circumstances that impact the Board’s exercise of discretion, including the merits

When considering whether to exercise discretion to deny a petition, we undertake a balanced assessment of all relevant circumstances in the case, including the merits. *Fintiv*, 14. Although we need not undertake a full merits analysis when evaluating *Fintiv* Factor 6, we consider the strengths and weaknesses of the merits, where stronger merits may favor institution and weaker merits may favor exercising discretion to deny

institution. *Id.* at 15–16. We also consider the other circumstances identified by the parties as pertinent to exercise of discretion.

i. Discovery Issues

As additional circumstances relevant to this factor, Patent Owner identifies Petitioner’s allegations of alleged prior sales and use of its TDP-PO plug. Prelim. Resp. 11. Patent Owner asserts that in response to these allegations, it “will counter with earlier sales and public disclosures (“NCS Disclosures”) that disqualify TCO’s Disclosures as prior art under 35 U.S.C. § 102(b)(1)(B).” *Id.* According to Patent Owner, “[t]hese are highly fact-intensive issues involving third parties” and “[t]he District Court, which will decide these issues first, is a better forum to flesh out the TCO and NCS Disclosures.” *Id.* Patent Owner asserts that “[t]here is critical discovery that will need to be conducted to determine if the TCO Disclosures qualify as invalidating prior art, and if the NCS Disclosures disqualify the TCO Disclosures as prior art.” *Id.*

In support of these assertions, Patent Owner argues that “[f]or instance, TCO alleges that a third-party foreign entity’s use of its TDP-PO plug is an invalidating ‘public use’” and “[t]here will need to be discovery on this issue from the third party. Indeed, the evidence of record demonstrates the need for such discovery from those with first-hand knowledge.” Prelim. Resp. 11 (citing Pet. 33–38). As another example, Patent Owner notes that “[i]n support of the alleged prior use, TCO submitted a declaration . . . ; however, that declarant was not in attendance at the alleged prior use and therefore has no first-hand knowledge as to the facts relevant to determining whether the use qualified as a ‘public use’ under the statute.” *Id.* at 12 (citing Ex. 1042 ¶¶ 18–28). Thus, according to

Patent Owner, “additional discovery will be required in this proceeding to resolve TCO’s challenges, including discovery on foreign entities with first-hand knowledge to determine whether the use was actually public.” *Id.* Patent Owner argues further that “[t]here does not appear to be a timely mechanism to trigger discovery obligations on a third-party foreign entity in this proceeding. The District Court, on the other hand, has extraterritorial subpoena power that can make the discovery timely available.” *Id.* Patent Owner offers further examples. *Id.* at 12–13.

Petitioner replies that Patent Owner’s “claim that this case requires extraterritorial, third-party discovery which is better suited before the district court is a red herring as none of that hypothetical discovery is needed or warranted to decide the issues in the PGR.” Prelim. Reply 7. According to Petitioner, Patent Owner “will have the opportunity to challenge Petitioner’s evidence and depose Petitioner’s declarants” and its “argument is a general attack on the statutory and regulatory limits of discovery in PGR proceedings and has no bearing under *Fintiv*.” *Id.*

On the record before us, we agree with Patent Owner that the unusual issues in the case are better resolved by the District Court. Even assuming that extraterritorial discovery is unnecessary, it appears that third-party discovery is required to resolve the issue of whether or not the TDP-PO plug qualifies as prior art as a “public use.” Institution in these circumstances raises concerns of inconsistent outcomes, which does not favor institution.

ii. The Merits
a. Indefiniteness

Petitioner alleges that claims 1–21 and 29 are indefinite. Pet. 42–45. Specifically, Petitioner asserts that claims 1 and 29 are indefinite as they recite “a rupturing force greater than the rupture burst pressure.” *Id.*

According to Petitioner, a person of ordinary skill in the art “cannot determine with reasonable certainty when a ‘force’ is greater than a ‘pressure’ because they use two different fundamental units of measurements.” *Id.* at 43 (citing Ex. 1002 ¶ 85).

The claim term “the rupture disc is . . . configured to rupture when exposed to a rupturing force greater than the rupture burst pressure” when read in light of the Specification can be understood by those skilled in the art as evidenced by the District Court’s rejection of an assertion of indefiniteness and entry of a construction of this term. Ex. 2017, 2. Thus, an initial review of the merits of Petitioner’s indefiniteness ground suggests that the merits are weak, which weighs in favor of denying institution.

b. Written Description

Petitioner alleges that claims 1–21 and 29 lack written description support in the Specification. Pet. 45–46. Petitioner’s argument is based on its argument that the claim term “the rupture disc is . . . configured to rupture when exposed to a rupturing force greater than the rupture burst pressure” is indefinite. *See id.* We, however, find this argument tenuous for the reasons offered by Patent Owner. *See* Prelim. Resp. 25. The argument is also belied by the District Court’s claim construction. Ex. 2017, 2. Thus, an initial review of the merits of Petitioner’s written description ground suggests that the merits are weak, which weighs in favor of denying institution.

*c. Anticipation By TDP-PO, and
Obviousness Based on Rogers and TDP-PO*

Petitioner alleges that claims 1, 28 and 29 are anticipated by TDP-PO. Pet. 46–65. Petitioner also alleges that claims 1–3, 8–18, 28–31, and 36–46 are unpatentable over Rogers and TDP-PO. *Id.* at 65–80. Patent Owner asserts that Petitioner’s challenge is fatally flawed because the Petition fails

“to map the TDP-PO plug to the limitation ‘the region of the tubular member where the rupture disc is attached ... is parallel to the internal diameter of the casing string,’ as recited by independent claims 1 and 28 (from which claims 2–21 and 29–49 depend, respectively).” Prelim. Resp. 26.

Regarding this limitation the Petition states that “[t]he region of the tubular member (*e.g.*, the TDP-PO housing) where the rupture disc (*e.g.*, glass plug) is attached has a larger diameter than the internal diameter of the casing string and is parallel to the internal diameter of the casing string, as depicted in the drawings below.” Pet. 58 (citing Ex. 1023 ¶¶ 24, 38; Ex. 1002 ¶¶ 103, 251). We do not reproduce the referenced drawings on pages 59–60 of the Petition. We note, however, that they do not identify the “region” Petitioner relies upon for this part of the challenge. Without an indication of what region the Petition relies upon to meet this limitation the challenge is incomplete.

For this reason, an initial review of the merits of Petitioner’s challenge based on TDP-PO alone and its challenge based on the combined teachings of Rogers and TDP-PO suggests that these challenges are weak, which weighs in favor of denying institution.

d. Anticipation by Entchev

Petitioner alleges that Entchev anticipates claims 1, 5–7, and 19. Pet. 80–90. Patent Owner asserts that Petitioner’s anticipatory argument . . . is deficient because TCO failed to map element [1.4] to Entchev. Prelim. Resp. 35.

According to Patent Owner, “[e]lement [1.4] recites ‘where the rupture disc is attached has a larger internal diameter than the internal diameter than the internal diameter of the casing string and is parallel to the

internal diameter of the casing string.” Prelim. Resp. 35–36. According to Patent Owner, Petitioner “claims that Entchev’s ‘seat’ is attached in such a region, and then identifies that region in green in annotated figures,” “[h]owever, “Entchev’s seat is not a plug and/or disc; instead, it is simply a ring that supports the plug. Indeed, the seat cannot plug anything, it has a hole.” *Id.* at 36 (citing Pet. 86–87). Patent Owner asserts that Petitioner “has not shown the Board where Entchev’s plug/disc is attached to a region that has a larger inner diameter than the casing string.” *Id.* Patent Owner asserts further that “looking at Figure 3B in TCO’s brief, the disc has the exact same inner diameter as the casing inner diameter and sits above the region that TCO has identified as the attachment region in green.” *Id.* (citing Pet. 87).

The Petition identifies Entchev’s frangible plug as corresponding to the claimed rupture disc. Pet. 86. Thus, it appears that Patent Owner mischaracterizes Petitioner’s challenge by asserting that the Petition equates Entchev’s seat with the claimed rupture disc. Accordingly, we are not convinced that this challenge is flawed in the manner argued by Patent Owner.

The entire limitation at issue recites “the region of the tubular member where the rupture disc is attached has a larger internal diameter than the internal diameter of the casing string.” Ex. 1001, 14:19–21. Thus, we understand the claim to require an attachment area of the tubular member that has a larger internal diameter than the internal diameter of the casing string. The Petition identifies the claimed region as corresponding to “the region where the seat seals the frangible plug to the tubular member.” *Id.* The Petition asserts that “Entchev discloses the region where the seat

attaches the plug to the tubular member as an ‘enlarged internal diameter 348’ or alternatively [h]as ‘recess 448’ machined into the housing of the tubular member.” *Id.* (citing Ex. 1025, 17:27–31, 20:25–26, 29:22–27; Ex. 1002 ¶ 312). The Petitioner asserts further that “[t]he enlarged or recessed internal diameter is larger than the internal diameter of the casing string.” *Id.* Thus, it appears that Patent Owner again mischaracterizes Petitioner’s challenge by asserting that the Petition equates the inner diameter of the seat with the claimed inner diameter, and we are not convinced that this challenge is flawed.

Upon initial review of the entire challenge, Petitioner’s arguments and evidence in support thereof, and Patent Owner’s arguments in response thereto, we consider the merits of this challenge to be strong.

*e. Obviousness Based on Entchev Alone,
Obviousness Based on Entchev and Lembcke,
and Obviousness Based on Entchev and
Fishbeck*

Petitioner alleges that claims 28, 29, 33–35, and 47 are unpatentable over Entchev. *Id.* at 90–98. Petitioner also alleges that claims 4 and 32 are unpatentable over Entchev and Lembcke. *Id.* at 99–100. And, Petitioner alleges that claims 19–21 and 47–49 are unpatentable over Entchev and Fishbeck. *Id.* at 100–104. Patent Owner reiterates its arguments discussed in the previous section. Prelim. Resp. 36–37. In addition, Patent Owner asserts that for independent claim 28 and its dependent claims (29, 32–35, and 47–49) the Petition’s inherency-based obviousness argument is based on an improper analysis. *See id.* at 37.

Focusing on the requirement in claim 28 that “the rupture disc is configured to disengage from sealing engagement when exposed to a

pressure greater than a hydraulic pressure in the casing string,” Patent Owner asserts that “[t]here is no evidence in the record to support [Petitioner’s] argument that Entchev’s bridge plug would necessarily withstand the hydraulic pressure and disengage from the frangible seat as required by claim 28.” Prelim. Resp. 38. Rather, Patent Owner asserts, “the evidence of the record shows a rapid decrease in pressure once the fluid seal is broken implying that the entire bridge/seat assembly fails.” *Id.* (citing Ex. 1039, 8–9). According to Patent Owner, “[t]he Petition acknowledges this by stating that the plug ‘may’ impact the bottom of the well or side of casing when the casing string bends or deviates,” but, Patent Owner asserts, “this is not what Entchev teaches. *Id.* (citing Pet. 38). In addition, Patent Owner asserts that Entchev does not even teach this possibility because, “Entchev discloses a vertical wellbore, not a deviated or bent wellbore.” *Id.*

Upon initial review of the portion of this challenge directed to the limitation at issue, we do not understand the challenge to be based on a theory of inherency. For example, the Petition states that “[a]lthough Entchev does not explicitly disclose an embodiment where the seat breaks before the plug, Entchev’s disclosure that both the plug and seat can be frangible teaches such a variation to a [person of ordinary skill].” Pet. 92 (citing Ex. 1025, 32:12–15; Ex. 1002 ¶ 331). The Petition goes on to describe the proposed modification stating that “[t]he only variation needed is to configure the frangible seat to break at a pressure which is less than the pressure the frangible plug breaks at, which is within the teachings of Entchev.” *Id.* (citing Ex. 1002 ¶ 332). Thus, Patent Owner’s assertions do not convince us that this challenge is flawed. Patent Owner relies on the same assertions regarding inherency to contest the challenges based on

Entchev and Lembcke and Entchev and Fishbeck. We have reviewed these challenges and do not understand them to rely in inherency for the limitation at issue either.

Upon initial review of the entirety of the challenges based on Entchev alone, Entchev in combination with Lembcke, and Entchev in combination with Fishbeck, Petitioner's arguments and evidence in support thereof, and Patent Owner's arguments in response thereto, we consider the merits of these challenges to be strong.

*f. Obviousness Based on Rogers and Entchev,
Obviousness Based on Rogers, Entchev, and
Lembcke, and Obviousness based on Rogers,
Entchev, and Fishbeck*

Petitioner alleges that claims 1–3, 5–19, 28–31, and 33–47 are unpatentable over Rogers and Entchev. Pet. 105–112. Patent Owner also alleges that claims 4 and 32 are unpatentable over Rogers, Entchev, and Lembcke and that claims 19–21 and 47–49 are unpatentable over Rogers, Entchev, and Fishbeck. *Id.* at 113–114. Patent Owner asserts that Petitioner “does not show a motivation to combine Entchev and Rogers.” Prelim. Resp. 40. Specifically, Patent Owner asserts that Petitioner “has not shown or even argued that a POSA would have sought to incorporate the bridge plug of Entchev into a process that does not include a settlement location for the pieces of the bridge plug, like Rogers.” *Id.* at 42. Patent Owner asserts further that Petitioner has not “shown that a POSA would have combined the debris catching features in Entchev with Rogers.” *Id.* We find Patent Owner's assertions credible.

Upon our initial review of this ground, we find that Petitioner's reasoning in support of the proposed combination is weak, which suggest

that the merits of the challenges relying on the combination of Rogers and Entchev are weak, which weighs in favor of denying institution.

iii. Summary

Although the merits of three of Petitioner’s challenges are strong, the merits of the other eight challenges are weak. Having considered the discovery issues raised by Patent Owner in addition to the merits of the challenges, we determine that this factor weighs against institution.

g. Holistic Analysis of Fintiv Factors

We undertake a holistic analysis of these factors, considering “whether efficiency and integrity of the system are best served by denying or instituting review.” *Fintiv*, Paper 11 at 6. In this case, all of the factors weigh in Patent Owner’s favor except for the first factor, which is neutral, and the fifth factor, which weighs against denial. Specifically, the overlap of the parallel proceedings, including the stipulation by Patent Owner, and the weakness of the merits of Petitioner’s petition outweigh the factors in favor of exercising discretion to institute *inter partes* review.

A balancing of the facts and circumstances as discussed above leads us to conclude, on this record, that the inefficient duplication of efforts here is likely. Accordingly, we determine that the circumstances presented weigh in favor of denying institution under 35 U.S.C. § 324(a).

III. PETITIONER’S MOTION TO SEAL, AND
JOINT MOTION FOR PROTECTIVE ORDER

Petitioner moved to seal Exhibits 1010–1013 and 1015–1023 and enter a proposed protective order as Ex. 1046. Pet. Mot. 1. Petitioner states that “[t]he Modified Protective Order follows the Board’s default protective order but adds an additional level of confidentiality for Outside Attorneys’ Eyes Only given the business nature of the confidential information

submitted, its irrelevance to patentability issues, and that Petitioner and Patent Owner (NCS Multistage Inc.) are business competitors.” *Id.* (citing TPG at 115). Subsequently, Petitioner and Patent Owner moved to revise the Modified Protective Order. Joint Mot. 1. The Parties state that “[t]he Revised Modified Protective Order follows the Board’s default protective order but adds an additional level of confidentiality for Outside Attorneys’ Eyes Only.” *Id.* at 2.

As provided under Rule 42.54(a), “[t]he Board may, for good cause, issue an order to protect a party from disclosing confidential information,” including forbidding the disclosure of protected information or specifying the terms under which such information may be disclosed. 37 C.F.R. § 42.54(a). The Board also observes a strong policy in favor of making all information filed in *inter partes* review proceedings⁹ open to the public. *See Argentum Pharms. LLC v. Alcon Research, Ltd.*, IPR2017-01053, Paper 27 at 3–4 (PTAB Jan. 19, 2018) (informative).

Under 37 C.F.R. § 42.14, the default rule is that all papers filed in such proceedings are available to the public. Only “confidential information” is subject to protection against public disclosure. 35 U.S.C. § 326(a)(7) (2018); 37 C.F.R. § 42.55. In that regard as noted in the Office’s Trial Practice Guide “[t]he rules aim to strike a balance between the public’s interest in maintaining a complete and understandable file history and the parties’ interest in protecting truly sensitive information.” TPG at 19. For confidential information, “[t]he rules identify confidential information in a manner consistent with the Federal Rules of Civil Procedure 26(c)(1)(G),

⁹ The same policy applies to post-grant proceedings as well.

which provides for protective orders for trade secret or other confidential research, development, or commercial information.” *Id.* (citing 37 C.F.R. § 42.54).

The moving party bears the burden of showing that the relief requested should be granted. 37 C.F.R. § 42.20(c). And the standard for granting Patent Owner's requested relief is “good cause.” 37 C.F.R. § 42.54(a); *Argentum*, Paper 27 at 3–4. To demonstrate “good cause,” the moving party must make a sufficient showing that: (1) the information sought to be sealed is truly confidential, (2) a concrete harm would result upon public disclosure, (3) there exists a genuine need to rely in the trial on the specific information sought to be sealed, and (4), on balance, an interest in maintaining confidentiality outweighs the strong public interest in having an open record. *Argentum*, Paper 27 at 3–4; *see also Corning Optical Communications RF, LLC, v. PPC Broadband, Inc.*, IPR2014-00440, Paper 46 at 2 (PTAB April 6, 2015) (requiring a showing that information has not been “excessively redacted”).

Petitioner states that it “would be harmed if it was forced to disclose its customers, customer contact information, pricing information, and trade secret information about its products to Patent Owner that are not pertinent to patentability issues raised in the Petition.” Pet. Mot. 9–10. Patent Owner did not file an opposition to the Modified Protective Order. Petitioner makes similar statements in the Revised Modified Protective Order. Joint Mot. 2–3.

Based on our review of Exhibits 1010–1013 and 1015–1023 and Petitioner’s representations, we are persuaded that good cause exists to seal these exhibits.

IV. CONCLUSION

Taking account of the information presented in the Petition, the Preliminary Response, the Preliminary Reply, the Preliminary Sur-Reply, and the evidence of record, we exercise our discretion under § 324(a) and deny institution. Accordingly, the Petition is denied, and no trial is instituted.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied, and no trial instituted.

FURTHER ORDERED that Petitioner's Motion to Seal is granted and the proposed Revised Modified Protective Order is entered.

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