

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PRECISION PLANTING, LLC and AGCO CORP.,
Petitioner,

v.

DEERE & COMPANY,
Patent Owner.

Case IPR2019-01044
Patent 8,813,663 B2

Before MICHAEL W. KIM, BARRY L. GROSSMAN, and
TIMOTHY J. GOODSON, *Administrative Patent Judges*.

GOODSON, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Precision Planting, LLC and AGCO Corp. (collectively, “Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting *inter partes* review of claims 1–8 of U.S. Patent No. 8,813,663 B2 (Ex. 1001, “the ’663 patent”). Deere & Company (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). After receiving our authorization to do so, Petitioner filed a Reply (Paper 11) and Patent Owner filed a Sur-Reply (Paper 12).

Pursuant to 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), the Board has authority to determine whether to institute *inter partes* review. *Inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). A decision to institute under 35 U.S.C. § 314 may not institute on fewer than all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

After considering the parties’ arguments and the evidence currently of record, we determine that Petitioner has shown a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims. Accordingly, we institute an *inter partes* review as to all challenged claims of the ’663 patent on the sole ground presented in the Petition.

II. BACKGROUND

A. *Related Proceedings*

Patent Owner is asserting the ’663 patent against Petitioner in *Deere & Company v. AGCO Corporation*, Civil Action No. 1:18-cv-00827-CFC in

IPR2019-01044
Patent 8,813,663 B2

the U.S. District Court for the District of Delaware (referred to herein as the “Delaware Case”). Pet. 7; Paper 6, 1.¹

In addition, Petitioner lists the following proceedings at the Board as related matters:

| Case No. | Challenged Patent |
|-----------------|----------------------------|
| IPR2019-01046 | U.S. Patent No. 9,480,199 |
| IPR2019-01047 | U.S. Patent No. 9,510,502 |
| IPR2019-01048 | U.S. Patent No. 9,686,906 |
| IPR2019-01050 | U.S. Patent No. 9,807,922 |
| IPR2019-01051 | U.S. Patent No. 9,807,924 |
| IPR2019-01052 | U.S. Patent No. 9,820,429 |
| IPR2019-01053 | U.S. Patent No. 9,861,031 |
| IPR2019-01054 | U.S. Patent No. 10,004,173 |
| IPR2019-01055 | U.S. Patent No. 9,699,955 |

Pet. 8.

¹ As originally filed, the -827 case cited above named only Petitioner AGCO as a defendant. See Ex. 2003, 1 (complaint in -827 case). Patent Owner filed a separate action against Petitioner Precision Planting in the same Delaware District Court, captioned *Deere & Company v. Precision Planting LLC*, Civil Action No. 1:18-cv-00828-CFC. See Ex. 2004, 1 (complaint in -828 case); Pet. 7; Paper 6, 1. However, our review of the docket indicates that the -827 and -828 cases have been consolidated, with the -827 case serving as the lead case. See “ORAL ORDER” entry for January 9, 2019. Thus, the -827 case now includes both of the entities that this Decision refers to collectively as Petitioner. For simplicity, this Decision refers to the -827 case as the Delaware Case.

B. The '663 Patent

The '663 patent issued on August 26, 2014 from an application filed on July 16, 2013. Ex. 1001, at (45), (22). The '663 patent states that it is a continuation of Application No. 12/364,010, filed February 2, 2009. *Id.* at (63).

The '663 patent relates to a seeding machine having a seed metering system and a seed delivery system for delivering seed from the meter to the ground. Ex. 1001, 1:12–14. In the “Background of the Invention,” the '663 patent explains that in known seed delivery systems, differences in how individual seeds exit the metering system and drop through the seed delivery tubes cause undesirable variations in seed spacing. *Id.* at 1:60–63. The '663 patent describes that its system reduces seed spacing variability by capturing the seed, and then moving it, on a controlled descent, from the point at which it exits the metering system to a point near the bottom of the seed trench, so that the seed is discharged at a substantially zero horizontal speed relative to the ground. *Id.* at 2:25–39.

Referring to Figure 3 of the '663 patent (reproduced below), seed stored in a seed hopper is provided to a seed meter that uses vacuum disk 50 to meter the seed to seed delivery system 28 that carries the seed to a planting furrow. Ex. 1001, 3:16–21.

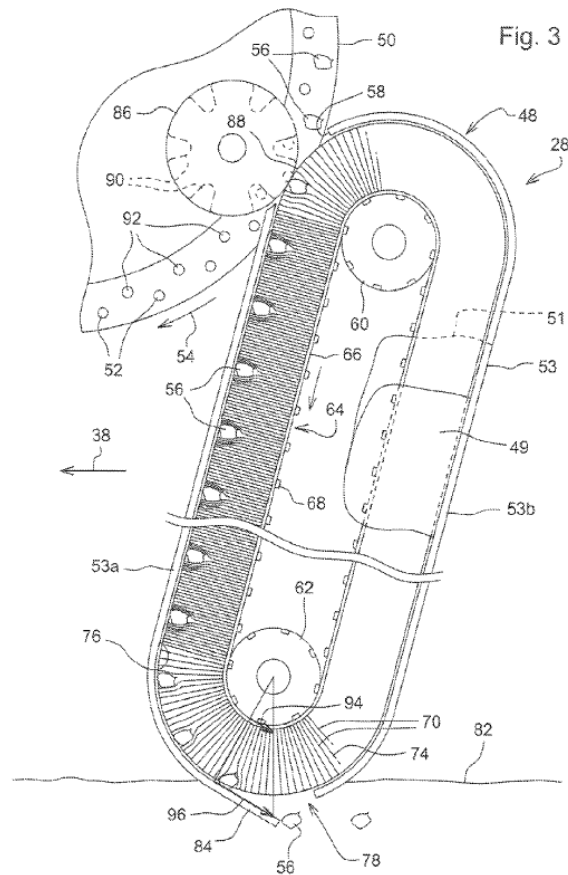


Figure 3 depicts an enlarged side view of a seed delivery system of one embodiment of the invention. Ex. 1001, 2:46–47, Fig. 1.

Metering disk 50 is generally flat with a plurality of apertures 52 that collect seeds 56 from a seed pool, which “adhere to the disk by air pressure differential on the opposite sides of the disk 50 in a known manner.” Ex. 1001, 3:37–41. Seed delivery system 28 “includes a housing 48 positioned adjacent the seed disk 50.” *Id.* at 3:34–36. Housing 48 includes upper opening 58 that “admits the seed from the metering disk 50 into the housing,” and “lower housing opening 78 . . . positioned as close to the

bottom 80 of the seed trench as possible,” through which the seed is discharged into the seed trench. *Id.* at 3:46–49, 58–60, 4:37–38.²

Pulleys 60, 62, mounted inside housing 48, support belt 64 for rotation within the housing. Ex. 1001, 3:49–51. The belt has elongated bristles 70, which serve to capture the seed. *Id.* at 3:52–54, 4:20–22. Loading wheel 86 adjacent upper opening 58 is positioned such that the path of the seeds on disk 50 brings the seeds into nip 88 formed between the loading wheel and distal ends 74 of bristles 70. *Id.* at 3:63–4:1.

As belt 64 rotates counterclockwise around the pulleys, the curve of the pulley causes distal ends 74 of bristles 70 to separate from one another. Ex. 1001, 4:10–15. When the disk brings the seeds into nip 88, the seeds are transferred from the seed meter to the delivery system. *Id.* at 4:16–21. Specifically, as the curved path straightens, the bristle ends close upon themselves and capture the seeds. *Id.* at 4:24–27. As the belt continues to move, bristles 70 convey the seeds downward to housing lower opening 78, with sidewall 53 of the housing cooperating with bristles 70 to hold the seed in the bristles. *Id.* at 4:27–31.

C. Illustrative Claim

Petitioner challenges claims 1–8, which are all of the claims in the ’663 patent. Claims 1, 4, and 6 are independent. Claim 1 is reproduced below, with bracketed labels as added by Petitioner:

1. [Pre] A seeding machine, comprising:
 - [a] a seed meter having a metering disk with a plurality of apertures in a circular array adapted to adhere seeds to the

² The ’663 patent specifies that “the term ‘upper opening’ shall be construed to mean an open area before the side wall segment 53a in the direction of belt travel and the term ‘lower opening’ shall mean an open area after the side wall segment 53a in the direction of belt travel.” *Id.* at 5:28–32.

metering disk to move the seeds along a seed path as the metering disk rotates;

[b] a seed delivery system associated with said seed meter;

[c] said seed delivery system including:

a housing for seed from said metering disk, the housing having a lower opening through which seed is discharged;

[d] a single endless member within said housing disposed around a first drive pulley and a second idler pulley, [e] said endless member engaging seed from the seed meter and moving the seed to said lower opening where seed is discharged from said housing; and

[f] a loading wheel engaging seeds adhered to the metering disk and moving along the seed path and guiding the seed into the single endless member whereby the single endless member moves the seed to the lower opening.

Ex. 1001 at 7:38–57; *see also* Pet. 43–67 (adding labels).

D. Asserted Ground of Unpatentability

Petitioner contends that the challenged claims are unpatentable based on the following ground:

| References | Basis ³ | Claims Challenged |
|--|--------------------|-------------------|
| Hedderwick, ⁴ Koning, ⁵ and Benac ⁶ | § 103(a) | 1–8 |

Pet. 43. In support of its proposed ground, Petitioner relies on the Declaration of Mr. Douglas S. Prairie. *See* Ex. 1002.

³ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, took effect on March 16, 2013. Because the application that issued as the ’663 patent states that it is a continuation of an application filed before March 16, 2013, we apply the pre-AIA versions of these statutes. *See* 35 U.S.C. § 100(i).

⁴ GB 2,057,835 A, published Apr. 8, 1981 (Ex. 1003).

⁵ US 4,193,523, issued Mar. 18, 1980 (Ex. 1004).

⁶ FR 2,414,288, published Aug. 10, 1979 (Ex. 1006). Citations to Benac in this Decision refer to the English translation in Exhibit 1005.

III. DISCRETIONARY DENIAL

Patent Owner presents the threshold issue of whether we should exercise discretion under 35 U.S.C. § 314(a) to deny institution based on the status of the Delaware Case introduced in Section II.A. *See* Prelim. Resp. 38–42; Sur-Reply 7–8. We have considered below all circumstances and arguments relevant to the § 314(a) discretionary denial inquiry. In summary, we determine that the facts of this case do not warrant discretionary denial. Facts weighing most in favor of discretionary denial include some overlap in claims, and overlap in the obviousness theories that Petitioner is pursuing here and in the Delaware Case. We are unpersuaded, however, that these facts collectively are sufficient to outweigh the facts that collectively weigh against. Facts weighing against include the following: (1) the differences in claims at issue; (2) the stage of the Delaware Case; (3) absence of issues under § 325(d); (4) absence of any prior petitions challenging this patent; and (5) our preliminary assessment that the challenges do not appear to be weak. Furthermore, as the oral argument in this proceeding is scheduled to occur approximately six weeks before the jury trial is currently scheduled to occur, we will endeavor to issue a final written decision as soon as practicable to assist the District Court. *See Sandoz, Inc. v. Pharmacyclics LLC*, IPR2019-00865, Paper 8 at 11 (PTAB Sept. 26, 2019) (“Also, we will endeavor to issue a final written decision as soon as practicable to assist the District Court with resolution of the ANDA proceeding.”). Thus, we do not exercise discretion to deny institution.

Arguing in favor of discretionary denial, Patent Owner states that “a separate, parallel district court proceeding is already underway in which the validity of the ’663 Patent is challenged based on the same prior art asserted

here.” Prelim. Resp. 39. Patent Owner asserts that Petitioner’s invalidity contentions regarding the ’663 patent in the Delaware Case assert obviousness combinations that include the same references Petitioner relies on here. *Id.* According to Patent Owner, the status of the Delaware Case at the time of the Preliminary Response was that “the parties have produced over one million pages of documents, claim construction briefing has started, and fact discovery depositions will begin shortly in accordance with the schedule set by the district court.” *Id.* at 40. A claim construction hearing is scheduled for December 3, 2019, and trial is scheduled to begin on October 19, 2020, which is before the statutory deadline for any final decision in this IPR. *Id.*; Ex. 2005 ¶¶ 12, 20, Ex. A.

Patent Owner urges that we should deny institution based on the advanced stage of the Delaware Case and to avoid duplication of effort. Prelim. Resp. 40–41; Sur-Reply 7–8. Patent Owner further argues institution would be inequitable because it would force Patent Owner “to defend the ’663 Patent simultaneously against the same prior art and substantially similar arguments in multiple proceedings” while Petitioner is able to adjust its strategy in this proceeding based on Patent Owner’s defenses in the Delaware Case. Prelim. Resp. 41–42.

For the reasons discussed below, we determine that the circumstances of this case do not warrant denial of institution under § 314(a). As an initial point, it is well settled that “the Director has complete discretion to decide not to institute review.” *Saint Regis Mohawk Tribe v. Mylan Pharms. Inc.*, 896 F.3d 1322, 1327 (Fed. Cir. 2018); *see also 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.”). The

Director has delegated these discretionary institution decisions to the Board. *See* 37 C.F.R. § 42.4(a).

The discretionary decision whether to deny institution under § 314(a) is based on “a balanced assessment of all relevant circumstances in the case, including the merits.” Trial Practice Guide Update, at 25 (July 2019), *available at* www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trial-practice-guide-july-2019-update. Those circumstances include “events in other proceedings related to the same patent, either at the Office, in district courts, or the ITC.” *Id.* In deciding whether to deny institution based on a parallel district court case between the parties, the Board has analyzed several considerations, which we will summarize and then assess in the context of this case.

A. Overlap of the Issues

Board decisions considering § 314(a) discretionary denial weigh whether the same evidence and arguments are presented in the petition as in the district court. *See NHK Spring Co. v. Intri-Plex Technologies, Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential) (noting that the petitioner was asserting the same prior art and arguments in the district court as in the petition); *Mylan Pharmaceuticals, Inc. v. Bayer Intellectual Property GmbH*, IPR2018-01143, Paper 13 at 13–14 (PTAB Dec. 3, 2018) (finding that it would be an inefficient use of Board resources to institute trial due, in part, to the “extensive overlap of the asserted prior art, expert testimony, and claim construction” in the co-pending district court case); *E-One, Inc. v. Oshkosh Corp.*, IPR2019-00161, Paper 16 at 7 (PTAB May 15, 2019) (observing that “[t]he issues, evidence, and argument presented in the Petition essentially duplicate what has been and continues to

be litigated in the Parallel District Court Case”); *cf. Uniden America Corp. v. Escort, Inc.*, IPR2019-00724, Paper 6 at 9–10 (PTAB Sept. 17, 2019) (determining that uncertainty as to the arguments, evidence, and prior art that will be asserted in the parallel district court case weighed against discretionary denial).

Also relevant to the analysis are similarities or disparities in the claims being challenged in the district court versus the petition. *Facebook, Inc. v. Blackberry Ltd.*, IPR2019-00899, Paper 15 at 12 (Oct. 8, 2019) (discretionary denial disfavored when the petition challenged additional claims beyond those reviewed by the district court); *Huawei Device Co. v. Optis Wireless Tech., LLC*, IPR2018-00653, Paper 27 at 11–12 (PTAB Mar. 13, 2019) (same); *Puma North America, Inc. v. Nike, Inc.*, IPR2019-01043, Paper 8 at 9–10 (PTAB Oct. 31, 2019) (same).

Board decisions have sometimes emphasized that commonality in the claim construction standard favors discretionary denial. That is, when the Board would be applying the same claim construction standard as the district court, the Board has considered this fact as favoring denial of institution. *See, e.g., NHK Spring*, Paper 8 at 19 (noting that “because the ’841 patent has expired, we will apply the same standard for claim construction as the district court”). However, the current version of the Board’s rules applies the *Phillips* standard to all *inter partes* reviews, not just those involving expired patents. *See Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340, 51,341 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42). Because this fact is now present in every AIA trial in

which there is a parallel district court case, our analysis for this inquiry turns on other facts.

The Petition asserts a single ground of obviousness, and the Petition's combination of references is one that is encompassed within the invalidity contentions Petitioner has presented in the Delaware Case. *See* Ex. 2006, 94, 96, 167, 171–72, 202 (Petitioner's invalidity contentions in the Delaware Case dated July 12, 2019); *see also* Ex. 2014, 1–2 (Petitioner's notice of reduction of asserted prior art references in the Delaware Case dated August 23, 2019, which continues to list Hedderwick, Koning, and Benac); Ex. 1036, 12, 208–10 (Petitioner's supplemental interrogatory response in the Delaware Case dated Nov. 1, 2019, which updates invalidity contentions). The Petition challenges claims 1–8, which are all of the claims in the '663 patent. In the Delaware Case, Petitioner is presently asserting invalidity theories as to claims 1 and 6, apparently because those are the claims Patent Owner is asserting in its infringement contentions. *See* Ex. 1036, 1–2. That the obviousness theories and prior art references relied on in the Petition are encompassed by the invalidity theories Petitioner is pursuing in the Delaware Case weighs in favor of discretionary denial. The fact that the Petition challenges claims that are not contested in the Delaware case, however, weighs against discretionary denial.

B. Stage of the Litigation

A further fact tending to weigh in favor of discretionary denial of institution is when the courts have already invested substantial resources adjudicating the same issues as are presented in a Board proceeding, or when trial in the parallel district court case has already occurred or is reasonably imminent. *See, e.g., NHK Spring*, Paper 8 at 20 (finding that the advanced

state of the district court case, which was set to go to trial approximately six months before the Board's final decision would be due, weighed in favor of denial); *E-One*, Paper 16 at 6–9 (denying institution where district court case was scheduled to conclude before a final decision from the Board would be due and the district court had already invested substantial resources deciding the claim construction and obviousness issues presented in the Petition); *Mylan*, Paper 13 at 13–14 (noting that the district court had already construed the claims and trial was scheduled for more than eight months before the Board's final decision would be due); *Thermo Fisher Scientific, Inc. v. Regents of University of California*, IPR2018-01370, Paper 11 at 26–27 (PTAB Feb. 7, 2019) (advanced stage of district court case favored denying institution where the district court had already construed the claims and the petitioner proposed using the district court's constructions in the IPR, and the district court's trial was scheduled to occur three months after the institution decision).

Conversely, when the district court has not yet expended resources on a case or the court's resolution of issues raised in a petition is distant, discretionary denial tends to be somewhat more disfavored. *Amazon.com, Inc. v. CustomPlay, LLC*, IPR2018-01496, Paper 12 at 8–9 (PTAB Mar. 7, 2019) (disagreeing that parallel district court case was at an advanced stage sufficient to warrant denial when the court had not yet construed the claims and, although trial was scheduled to occur before the Board's final decision would be due, the court had already extended some of the deadlines in the case schedule); *Abbott Vascular, Inc. v. FlexStent, LLC*, IPR2019-00882, Paper 11 at 30–31 (PTAB Oct. 7, 2019) (determining that the “early stage of the district court litigation” weighed against discretionary denial despite a

trial date four months later, because summary judgment briefing and claim construction had not yet occurred).

In our view, in assessing the stage of the parallel litigation for purposes of an institution decision, work already completed by the district court weighs more than future planned activity. District court litigation is not subject to fixed, immutable deadlines for final disposition. Courts can, and often do, extend or accelerate deadlines and modify case schedules for myriad reasons. *See Dietz v. Bouldin*, 136 S.Ct. 1885, 1892 (2016) (“[D]istrict courts have the inherent authority to manage their dockets and courtrooms with a view toward the efficient and expedient resolution of cases.”). Courts also have the ability to stay their proceedings pending resolution of parallel actions, *id.* (citing *Landis v. North American Co.*, 299 U.S. 248, 254 (1936)), and district courts have the discretion to order stays after the Board has decided to institute a trial on an asserted patent. *See, e.g., NFC Technology LLC v. HTC America, Inc.*, 2015 WL 1069111, at *6 (E.D. Tex. Mar. 11, 2015) (Bryson, J., sitting by designation) (collecting cases to demonstrate that “courts have been nearly uniform in granting motions to stay proceedings in the trial court after the PTAB has instituted inter partes review proceedings”). Thus, in our discretionary denial analysis, we place more emphasis on the activities already undertaken in the district court as of the time of the institution decision, and less emphasis on potential events that are scheduled well into the future.

Here, we are not persuaded that the Delaware Case is at such an advanced stage that it weighs dispositively in favor of denial. The district court has not issued a claim construction ruling, fact discovery does not close until February 2020, expert discovery ends in June 2020, and

dispositive motion briefing is scheduled to be completed in August 2020. Ex. 2005, 13–14. Currently, actions involving issues common to this proceeding that the district court itself has taken or will almost certainly soon undertake appear to be limited to a claim construction hearing scheduled for December 3, 2019. Prelim. Resp. 40; Ex. 2005, 13.

Patent Owner points to the presently scheduled trial date of October 19, 2020, which is more than a month before the final decision will be due in this case. Ex. 2005, 14. Patent Owner cites, in support, several decisions where a parallel district court case was in a “late stage,” and was scheduled to conduct a trial before the Board’s final decision would be due. Prelim. Resp. 38–41 (citing *NHK Spring*, Paper 8 at 20; *Mylan*, Paper 13 at 6; *E-One*, Paper 16 at 7). We are unpersuaded that the facts of those cases are sufficiently similar to the circumstances here. Most prominently, in *NHK Spring*, the jury trial was set for six months before the final written decision would have been due, and the district court had already construed the claims at the time of institution. *NHK Spring*, Paper 8 at 20. Neither of those facts, each of which involves an expenditure of resources by the district court, is present here. Other district court milestones mentioned in *NHK Spring* were also more imminent than they are in our facts: expert discovery was scheduled to end approximately six weeks after institution in *NHK Spring*, whereas expert discovery in the Delaware Case is scheduled to end in approximately six months. *Id.* Similarly, in its § 314(a) analysis in *Mylan*, the Board noted that it was a combination of the fact that the district court had already construed the claims in the same way the Board had, coupled further with the fact that the district court’s trial was less than four months away, that led to the Board’s exercise of discretion. *Id.* In *E-One*,

the district court had already invested substantial resources in deciding issues common to the petition, because it had construed the claims and issued a preliminary injunction ruling that considered and rejected the same obviousness argument presented in the petition. *E-One*, Paper 16 at 7–8.⁷

The facts here are closer to cases in which the Board has determined that a scheduled trial date in a parallel district court case before the deadline for a final written decision is not at such a “late stage” that institution should be denied. *See, e.g., Abbott Vascular*, Paper 11 at 31 (“First, the district court proceeding remains in its early stages. While discovery in the district court proceeding has commenced, fact discovery will not close, and expert discovery will not begin, until after issuance of this decision.”); *Amazon.com*, Paper 12 at 8–9 (disagreeing that parallel district court was at an “advanced stage” such that denial was warranted when the district court had not yet construed the claims and deadlines for discovery would not occur until after a claim construction ruling); *see also Samsung Electronics Co. v. Immersion Corp.*, Case IPR2018-01499, Paper 11 at 13–21 (PTAB Mar. 6, 2018) (declining to exercise discretion to deny institution when trial in co-pending district court case, which had already been moved twice, was set to begin ten months before Final Written Decision would be due). Patent Owner also points to the other activities that the parties have carried out in

⁷ In *Facebook*, the parallel litigation was at a stage closer to *NHK Spring* and *Mylan* than the current proceeding, for example, because a final ruling on claim construction had been issued and a jury trial was scheduled for about six months prior to the deadline for a final written decision. *Facebook*, Paper 15 at 11. Even there, however, the Board determined that the presence of other facts, such as non-overlapping issues, was sufficient to weigh dispositively against discretion to deny institution. *Id.* at 12.

the Delaware Case to support a finding that the parallel litigation is at a late stage. *See* Prelim. Resp. 40 (reporting that “the parties have produced over one million pages of documents, claim construction briefing has started, and fact discovery depositions will begin shortly”). But, as set forth above, we assess more weight in the discretionary denial analysis on the resources that the district court has invested in the issues common to the Board proceeding. This is because main purpose served by discretionary denial is to conserve Office resources by avoiding wasteful duplication of effort, minimizing the potential for inconsistent outcomes, and ensuring that the Office allocates its adjudicative resources effectively and efficiently. *See* Trial Practice Guide Update, at 23 (noting that the Director’s discretion under § 314(a) is informed by the requirements under §§ 316(b) and 326(b) to consider effects on “the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings instituted under this chapter”). That is not to say that resources expended by the parties are irrelevant. To the contrary, the more a party can show that such expenditures of resources are closely related to the patentability challenge being disputed in an IPR, the more relevant they become. Here, however, Patent Owner does not tether the million page document production or other fact discovery efforts the parties have undertaken in the Delaware Case to the patentability challenges at issue here, so we are not persuaded that those efforts militate sufficiently in favor of discretionary denial.

The *inter partes* review system set up by Congress provides for instituting an *inter partes* review, notwithstanding an eighteen month lead time in the district courts. Under § 315(b), a IPR petition must be filed

within one year of being served with a complaint alleging infringement of the patent challenged in the petition. 35 U.S.C. § 315(b). The statutes also provide that the patent owner has the right to file a preliminary response to the petition, within a time period set by the Director. *Id.* § 313. The Director has set the time period no later than three months after the date of a notice indicating that the request to institute an *inter partes* review has been granted a filing date. 42 C.F.R. § 42.107(b). The statute then requires the Director to determine whether to institute an *inter partes* review within three months after the date set for filing the preliminary response. 35 U.S.C. § 314(b). This statutory schedule allows for initiation of an *inter partes* review within approximately eighteen months after service of a complaint in district court. Certainly this is not to say that for every petition filed, the status of the parallel litigation should not be taken into account. Indeed, *NHK Spring* and other cases are precedential, and stand for the opposite. We only note the above to indicate that Congress contemplated that many reviews would be instituted where progress had been made in the parallel litigation, and that any analysis on whether to exercise our discretion to deny under § 314(a) should be conducted with that reality in mind.

For these reasons, we find that the Delaware Case is not at a sufficiently “late stage” to weigh in favor discretionary denial of institution.

C. Petitioner’s Delay in Filing Petition

In some cases, the Board has indicated that a petitioner’s unreasonable delay in filing its petition weighed in favor of discretionary denial. In *NetApp, Inc. v. Realtime Data LLC*, IPR2017-01195, Paper 9 (PTAB Oct. 12, 2017), the Board exercised discretion to deny institution, in part because the petitioner’s delay in filing the petition prevented the Board from

being able to join the petitioner's case with earlier-filed proceedings challenging the same patent, thereby necessitating a separate proceeding that involved the same issues as the earlier proceedings. *Id.* at 12–13. “The result [of instituting] would be a significant waste of the Board's resources. There would be no offsetting conservation of the Eastern District of Texas' judicial resources because any final written decision in this proceeding would not issue until well after the scheduled trial date in [the parallel district court case].” *Id.*

Similarly, in *Next Caller Inc. v. Trustid, Inc.*, IPR2019-00961, Paper 10 (PTAB Oct. 16, 2019), the Board found that the petitioner should have been aware of the art asserted in its petition at an earlier point in time, because the same petitioner had filed an earlier petition challenging a related patent based on the same art. *Id.* at 3, 15–16. The Board noted that if the petitioner had filed its petition at the same time as its earlier petition challenging the related patent, “the proceeding in this case may have resolved the issues prior to [trial in] the Parallel District Court Proceeding. Accordingly, Next Caller's unexplained delay in filing this Petition favors denying institution under § 314.” *Id.* at 16.

Other Board decisions, facing different facts, have reached different conclusions regarding the import of a petitioner's delay. For example, in *Amazon.com*, a patent owner argued for discretionary denial in part because petitioner delayed filing the petition until one day before the deadline under § 315(b), assertedly in order to obtain the tactical advantage of learning more about patent owner's litigation positions. *Amazon.com*, Paper 12 at 6. The Board found this argument unpersuasive because § 315(b) provides one year after service of a complaint for the filing of a petition, and “does not set

forth any basis for treating petitions differently depending on which day within that year they are filed.” *Id.* at 7–8. As to the petitioner’s intent in waiting until the end of the statutory period to better understand the basis for the infringement allegations, the Board was not persuaded that this weighed in favor of denial because “the legislative history of the AIA indicates that Congress was aware the one-year period in § 315(b) would be used for this sort of activity.” *Id.* at 8.

Here, Patent Owner argues that Petitioner waited until only three days before its statutory deadline to file this petition, which delay Patent Owner asserts “was calculated to ensure that this proceeding would not be decided until after a jury trial” in the Delaware Case. Prelim. Resp. 42. Patent Owner has not directed us to any persuasive evidence to support this argument. Leaving aside the debate as to whether filing a petition within the statutorily allotted timeframe can ever be considered dilatory, we are not persuaded that Petitioner’s delay weighs in favor of discretionary denial in the circumstances of this case. Patent Owner’s complaint in the Delaware Case asserted twelve patents against Petitioner. Ex. 2003 ¶ 1. The Petition in this case is one of ten IPRs Petitioner has initiated to challenge ten of Patent Owner’s patents. *See supra* § II.A. We are cognizant of the significant amount of work that is required to prepare ten petitions for *inter partes* review. In these circumstances, we are not persuaded that Petitioner’s use of the full year allowed under § 315(b) represents dilatory conduct that weighs in favor of discretionary denial.

D. Presence of Other Facts Affecting Discretionary Denial

As noted previously, the presence of a parallel district court case is only one component in the institution decision, which is a “balanced

assessment of all relevant circumstances in the case, including the merits.” Trial Practice Guide Update, at 25. Thus, sometimes other facts besides the status of a parallel district court case affect the outcome of the discretionary denial decision.

An example is when there is a separate and independent basis for discretionary denial under § 325(d), as occurred in the *NHK Spring* and *Mylan* cases discussed above. See *NHK Spring*, Paper 8 at 20 (noting, after concluding that § 325(d) supported denial, that “the advanced state of the district court proceeding is an **additional** factor that weighs in favor of denying the Petition.”) (emphasis added); *Mylan*, Paper 13 at 12 (turning to § 314(a) after determining that the first of petitioner’s two asserted grounds should be denied institution under § 325(d)). In this case, Patent Owner relies solely on the Delaware Case as the basis for discretionary denial. See Prelim. Resp. 38–42; Sur-Reply 7–8. As Petitioner points out, the prior art combination on which this Petition was based was not considered during prosecution. Reply 7.

Another additional fact that can influence the discretionary denial decision is when the petition is part of a series of attacks on the patent that have a harassing or abusive effect on the patent owner. The Board’s *General Plastic* analysis is aimed at addressing this scenario. See *General Plastic Industrial Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (PTAB Sept. 6, 2017) (precedential in part). Patent Owner cites Board decisions recognizing the potential inequity of a patent owner being subject to repeated, serial attacks of its patent, and argues that instituting here would be inequitable. See Prelim. Resp. 41–42 (citing *NVIDIA Corp. v. Samsung Elec. Co.*, IPR2016-00134, Paper 9 at 8 (PTAB 2016); *Microsoft Corp. v.*

Koninklijke Philips N.V., IPR2018-00277, Paper 10 at 7 (PTAB June 8, 2018). But Patent Owner does not point to any challenge of the '663 patent aside from the invalidity defenses in the Delaware Case. Filing a petition for *inter partes* review after being sued for infringement is not a serial challenge weighing in favor discretionary denial. As Petitioner points out, the statutory scheme “specifically contemplates a Petition filed with co-pending litigation by allowing filing one year after service of the complaint.” Reply 7 (citing 35 U.S.C. § 315(b)); *see also Samsung*, Paper 11 at 17 (observing that “AIA trials have a statutory bar that is premised on the fact that IPRs will be filed with co-pending litigation”). We are not persuaded that Petitioner’s filing of a single petition to challenge the '663 patent after being sued for infringement should be considered a fact weighing in favor of discretionary denial.

The Board’s assessment of the merits of a petitioner’s challenges can also affect the discretionary denial decision under § 314(a). *E.g.*, *Comcast Cable Communications, LLC v. Rovi Guides, Inc.*, IPR2019-00231, Paper 14 at 11 (PTAB May 20, 2019) (determining that the merits of the petitioner’s proposed ground were sufficiently strong to weigh against discretionary denial); *Thermo Fisher*, Paper 11 at 27 (denying institution due in part to an imminent trial in the parallel district court case, but also assessing that the merits of the petition were weak and did not establish a reasonable likelihood of prevailing on any challenged claim). As to the merits of Petitioner’s asserted ground, we do not assess the challenge to be weak for the reasons discussed in Section VI. In short, based on the current record, we determine that Petitioner has made a sufficient showing that the cited combination teaches the limitations of the challenged claims, and that an

ordinarily skilled artisan would have had reason to combine the teachings of the references in the proposed manner and would have had a reasonable expectation of success in doing so.

Thus, apart from the Delaware Case, there are no other facts affecting the discretionary denial decision.

E. Conclusion Regarding Discretionary Denial

After considering all of the circumstances the parties have presented that are relevant to the § 314(a) discretionary denial inquiry, we determine that the facts of this case do not warrant discretionary denial. Facts weighing most in favor of discretionary denial include some overlap in claims, and overlap in the obviousness theories that Petitioner is pursuing here and in the Delaware Case. We are unpersuaded, however, that these facts collectively are sufficient to outweigh the facts that collectively weigh against. The facts weighing against include the following: (1) the differences in claims at issue; (2) the stage of the Delaware Case; (3) absence of issues under § 325(d); (4) absence of any prior petitions challenging this patent; and (5) our preliminary assessment that the challenges do not appear to be weak. Furthermore, as the oral argument in this proceeding is scheduled to occur approximately six weeks before the jury trial is currently scheduled to occur, we will endeavor to issue a final written decision as soon as practicable to assist the District Court. . Thus, we do not exercise discretion to deny institution.

IV. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner proposes that a person of ordinary skill in the art “would have had either (1) a bachelor’s degree plus four years of experience in mechanical engineering, agricultural engineering, or a related field or (2) a

master's degree plus two years of experience in mechanical engineering, agricultural engineering, or a related field.” Pet. 42 (citing Ex. 1002 ¶¶ 19–20). Patent Owner does not respond to Petitioner's proposal or provide its own definition of the level of ordinary skill in the art. Based on our review of the record at this preliminary stage, we find that the evidence adequately supports Petitioner's proposal. Thus, we preliminarily adopt Petitioner's proposed definition of the level of ordinary skill in the art, and apply it in our analysis below.

V. CLAIM CONSTRUCTION

“In an *inter partes* review proceeding, a claim of a patent . . . shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (codified at 37 C.F.R. § 42.100(b) (2019)) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018).⁸ That standard “includ[es] construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*; *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

Petitioner asserts that the each claim should be construed “in accordance with the ordinary and customary meaning of such claim as understood by a person of ordinary skill in the art” and “no terms need to be construed.” Pet. 40. Patent Owner agrees that no claim terms need to be

⁸ The Petition was filed May 29, 2019. *See* Paper 3.

construed. Prelim. Resp. 5 n.1. On this record and for purposes of this decision, we determine that no claim term requires express construction. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that only claim terms that are in controversy need to be construed and “only to the extent necessary to resolve the controversy”); *see also Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (applying *Vivid Techs.* in the context of an *inter partes* review).

Our determination regarding claim construction in this Decision does not preclude the parties from arguing for claim constructions during trial. To the contrary, claim construction, in general, is an issue to be addressed at trial. Claim construction will be determined at the close of all the evidence and after any oral argument. The parties are expected to assert all their claim construction arguments and evidence in the Petition, Patent Owner’s Response, Petitioner’s Reply, or otherwise during trial, as permitted by our rules.⁹

VI. ANALYSIS OF PROPOSED GROUND

A. *Legal Standard for Obviousness*

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under § 103 that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and

⁹ As set out in the Order section below, Petitioner must file as an exhibit in this proceeding any substantive ruling on claim construction in the Delaware Case within five days of any such ruling.

(4) “secondary considerations” of nonobviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” *Id.* at 17–18; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007).

At this stage of the proceeding, neither party has presented evidence or argument directed to secondary considerations. The first *Graham* factor was discussed above in Section IV. Our discussion below addresses the remaining *Graham* factors.

B. Obviousness Based on Hedderwick, Koning, and Benac

Petitioner contends that claims 1–8 would have been obvious over Hedderwick, Koning, and Benac. Pet. 43–85. Patent Owner disputes these contentions. Prelim. Resp. 5–37. After considering the arguments and evidence currently of record, we determine that Petitioner has established a reasonable likelihood of prevailing in this ground.

1. Summary of Hedderwick

Hedderwick relates to a precision seeder, which it defines as “a seeding device able to deposit single seeds at predetermined spacings.” Ex. 1003, 1:5–8. The seeder includes a seed hopper that transfers seed to a rotating vacuum disc, which has orifices around its periphery that receive and retain seeds by pressure differential. *Id.* at 3:46–52. Figure 2 is reproduced below:

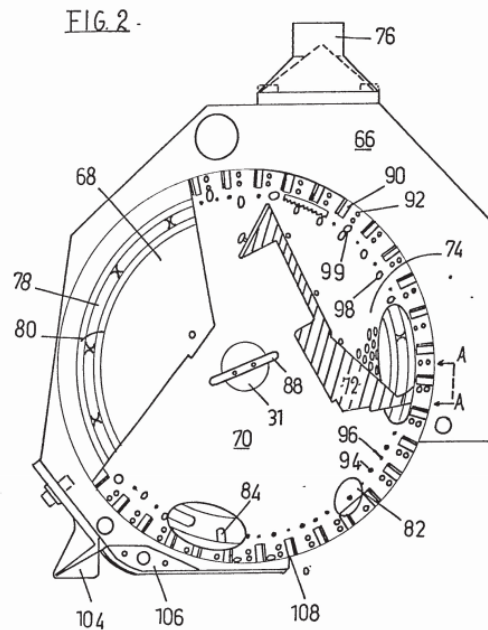


Figure 2 depicts a side elevational view of a seeder casing with the disc in place and with surface portion broken away to illustrate the operation of the seeder. *Id.* at 1:100–101.

The vacuum disc rotates in a counterclockwise direction, past various devices, to ensure that a single seed is retained by the orifice, and continues to rotate until the “seeds have passed the end of vacuum inlet 78 at about 7 o’clock.” Ex. 1003, 3:45–61. When the seeds’ “associated vacuum holes 94 are in register with recess 84 in the wear plate 80,” the seeds drop into a cell bounded by fins 90. *Id.* at 3:55–63. The seed fall from the cell when it reaches drop off lip 108, which is positioned slightly past bottom dead center. *Id.* at 3:66–73.

Hedderwick describes a second embodiment for use when “the vertical distance to be travelled by the seeds is greater.” Ex. 1003, 4:2–5. Figure 4 is reproduced below:

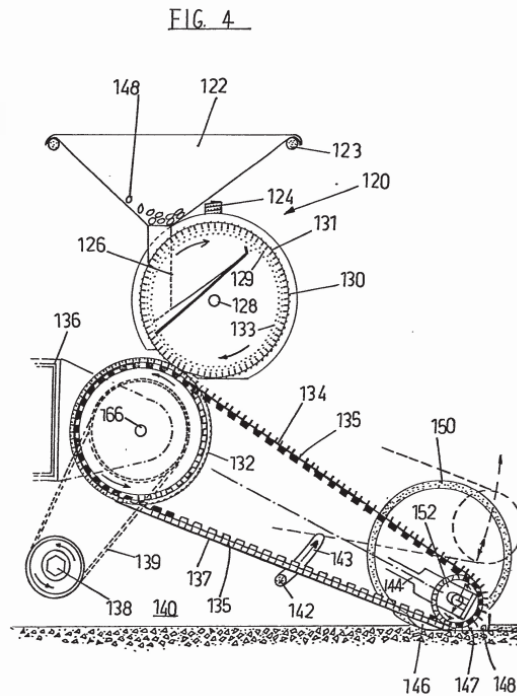


Figure 4 depicts a side elevational view of a seeder with parts broken away. *Id.* at 1:108–109.

Disc 130 of the second embodiment can have the same construction as disc 70 shown in Figure 2, although disc 130 rotates in a clockwise direction in Figure 4. *Id.* at 4:10–13, 5:51–53. “The major change in the seeder is the provision of an endless belt 134 which has a series of fins 135 projecting upwardly therefrom.” *Id.* at 4:23–25. Fins 135, together with casing 137 and belt 134, define a series of moving cells. *Id.* at 4:23–28; Fig. 4. These “cells are synchronised to align with orifices 129 of disc 130,” such that when disc 130 releases a seed it is released into a cell and each cell carries a seed. *Id.* at 4:28–5:5. Belt 134 passes over idler sprocket 152 and driven sprocket 132, which drives the belt and thus seeds 148 in the cells, to an end of casing 137 where the seed is discharged. *Id.* at 5:6–7, 74–78; Fig. 4.

2. Summary of Koning

Koning “relates to a planting machine for potatoes, bulbs or similar seed crop.” Ex. 1004, 1:5–6. Figure 4 is reproduced below:

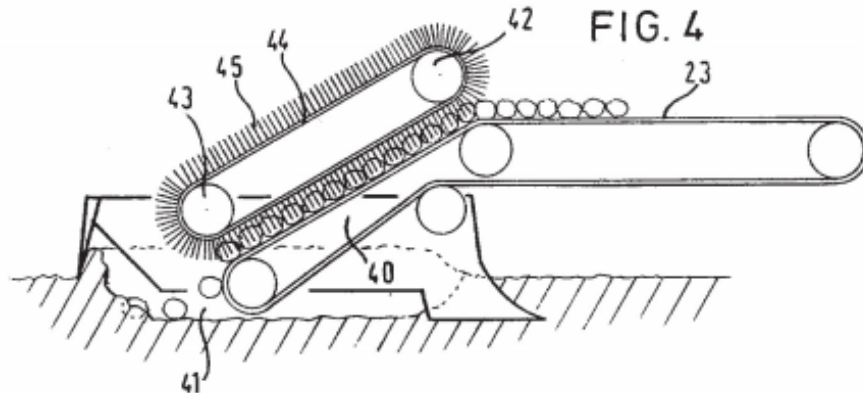


Figure 4 depicts an end part of a planting machine schematically in a side view. *Id.* at 3:32–33.

The planting machine includes conveying member 23 having part 40 that extends in a backward direction to a point in furrow 41. *Id.* at 5:3–6. Belt 44 is above part 40, is guided around rollers 42 and 43, and includes brush hairs 45. *Id.* at 5:6–8. Brush hairs 45 hold the seed crop on part 40 so that the seed crop delivered by the conveying members are delivered at “the same distance in relation to each other in the furrow 41.” *Id.* at 5:8–14. Specifically, “the brush hairs hold the potatoes or the like lying on the conveying surface till the moment that they leave the belt.” *Id.* at 3:16–18. By holding the potatoes or the like “till the very last moment [] the velocity of the potatoes in relation to each other is completely defined. Under all circumstances a regular distribution of the potatoes in the furrow is obtained.” *Id.* at 3:18–22.

3. Summary of Benac

Benac relates to a vacuum seed spreader. Ex. 1005, 1:1. The “vacuum seed spreader comprising, as is known, a rotary vertical disk 1

forming a partition between a seed chamber 2 and a vacuum chamber 3, generally of annular form.” *Id.* at 3:15–18. As seen in Figure 1, reproduced below, disk 1 “is pierced with orifices 4 evenly distributed over a circle concentric to the disk.” *Id.* at 3:20–21.

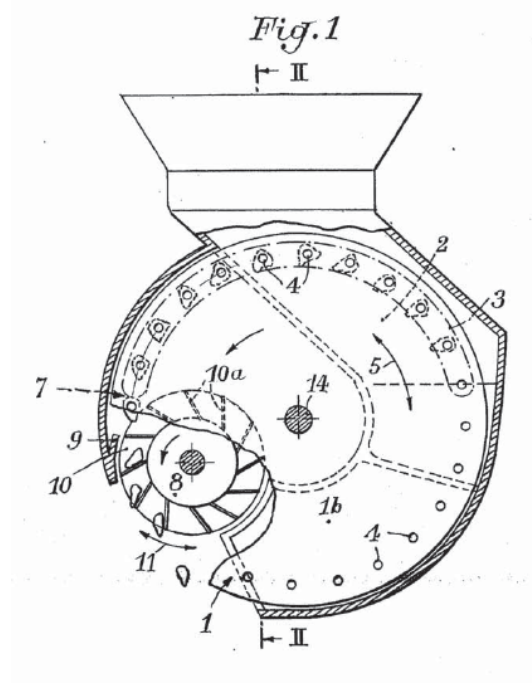


Figure 1 depicts a cross-sectional view of a seed spreader. Ex. 1005, 3:1.

Suction from the vacuum chamber draws seeds against the orifices so that the seeds rotate with the disk. *Id.* at 3:29–31. “A paddle wheel 8 is adjacent to the first face 1a of the disk and determines, with this face 1a and with a casing 9 that is adjacent and concentric to the paddle wheel, sealed cells 10 for the seeds.” *Id.* at 4:6–9. The bottom of casing 9 opens to dropping zone 11 in which the seeds are dropped or projected toward the ground. *Id.* at 4:11–13. Cells 10 of the paddle wheel “transport, one by one, the seeds released from the vacuum in the zone 7 just into the dropping zone 11.” *Id.* at 4:13–15. Specifically, “paddles 10a of the paddle wheel 8 sweep the orifices 4 of the disk between the release zone 7 and the dropping zone 11,

such that the seeds are necessarily extracted from the orifices 4 upstream of the dropping zone.” *Id.* at 5:4–9.

4. *Analysis*

a. *Claim 1*

Petitioner contends that Hedderwick teaches the preamble and limitation [a]. *See* Pet. 43–46. Regarding limitations [b]–[e], Petitioner proposes modifying Hedderwick by replacing finned belt 134 with Koning’s brush belt with bristles, and contends that Hedderwick so modified teaches limitations [b]–[e]. *See id.* at 46–61. Petitioner contends that Benac’s paddle wheel corresponds to the “loading wheel” recited in limitation [f], and that when Benac’s paddle wheel is incorporated into Hedderwick, the resulting combination teaches every aspect of limitation [f]. *See id.* at 62–67. Petitioner’s contentions regarding how the cited combination teaches the limitations of claim 1 are supported by specific citations to the record. In its Preliminary Response, Patent Owner does not contest Petitioner’s assertions that the cited references teach the limitations of the claim, and instead challenges Petitioner’s arguments regarding motivation to combine.

Turning to that issue, Petitioner asserts motivations for the proposed modification based on Koning and for the Benac combination. We will discuss the two asserted motivations separately, because each is challenged by Patent Owner.

(1) *Motivation – Koning*

Petitioner argues that an ordinarily skilled artisan would have been motivated to replace Hedderwick’s finned belt with Koning’s brush belt to achieve the benefits of finer seed spacing disclosed in Koning. Pet. 49–50 (citing Ex. 1004, 5:8–14; Ex. 1002 ¶ 95). Koning achieves its goal of

uniform spacing, Petitioner asserts, because its brush belt ensures that the velocity of the seeds in relation to each other is “completely defined.” *Id.* at 35 (quoting Ex. 1004, 3:12–22). Petitioner argues that in Hedderwick, seeds can move within the cells of the finned belt, which means that “Hedderwick’s endless belt does not completely define the velocity of the seeds relative to one another.” *Id.* at 36 (citing Ex. 1003, 5:74–77). According to Petitioner, an ordinarily skilled artisan “desiring finer control over seeds as they descend to the furrow would recognize that replacing Hedderwick’s endless belt with Koning’s brush belt would provide certain benefits—delivering seeds the same distance apart and with a consistent relative velocity—that further their common goal of achieving accurate seed spacing.” *Id.* at 37.

Patent Owner challenges Petitioner’s motivation to combine Hedderwick with Koning on several grounds. *See* Prelim. Resp. 8–26. Before addressing Patent Owner’s arguments on this issue, we note that based on the current record, it is unclear why Koning is necessary for Petitioner’s challenge. The role Koning plays is to supply the “endless member” recited in limitation [d]. *See* Pet. 57. Petitioner presents the alternative theory that if the “endless member” is broader than a brush belt with bristles and includes other types of endless belts, then the claims “are still unpatentable, in view of Hedderwick and Benac, either with or without Koning’s brush belt.” Pet. 43 n.9. However, neither party has proposed any express construction of that term, let alone the one posed in the alternative by Petitioner, and without such a construction, it is unclear why the plain and ordinary meaning of “endless member” would exclude Hedderwick’s belt 134. Thus, if Koning is unnecessary, there is no need for Petitioner to

provide a motivation to combine Hedderwick and Koning. Nevertheless, for completeness, we will address Patent Owner's arguments regarding motivation to combine Hedderwick and Koning.

First, Patent Owner argues that Koning and Hedderwick are in different fields because Koning's system is for potatoes, which are larger than the seeds for which Hedderwick is intended. *See* Prelim. Resp. 8–11. Because of their different shape and mass, Patent Owner argues that the considerations for planting potato are different than seeds, and an ordinarily skilled artisan would not look to bulb crop systems like Koning to address uniform seed spacing problems. *Id.* at 12–13. We understand Patent Owner to be arguing that Koning is non-analogous art. *See, e.g., id.* at 13 (referring to the field of endeavor test); *id.* at 17 (transitioning to the next argument by arguing that even if “Koning were considered to be within the same field as, or pertinent to, the problem addressed by a small seed row crop planter . . .”).

“Two separate tests define the scope of analogous prior art: ‘(1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.’” *Airbus S.A.S. v. Firepass Corp.*, ___ F.3d ___, 2019 WL 5849523, at *4 (Fed. Cir. Nov. 8, 2019) (quoting *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004)). On the current record, Koning appears to be within the same field of endeavor as the '663 patent and Hedderwick: seeding machines. *See* Ex. 1001, 1:12–14 (describing the Field of the Invention as “a seeding machine having a seed metering system and a seed delivery system for

delivering seed from the meter to the ground”); Ex. 1003, 1:5 (“This invention relates to a precision seeder”); Ex. 1004, 1:5–6 (“The invention relates to a planting machine for potatoes, bulbs, or similar seed crop . . .”). Koning also appears to be reasonably pertinent to uniformly spacing seeds, the problem the inventors of the ’663 patent were addressing. *See* Ex. 1001, 1:30–33 (“[T]he mechanisms necessary to properly meter the seeds, and dispense the seeds at predetermined relative locations within the seed trench are relatively complicated.”); Ex. 1004, 1:9–12 (“The invention has for its object to provide a planting machine . . . which ensures a particularly uniform distribution of the seed potatoes or like, even if the seed potatoes have different sizes and if the shape of the seed crop is irregular.”). Thus, on the current record, we determine that Koning qualifies as analogous art.

Patent Owner also contends that Petitioner is judicially estopped from arguing that Koning and Hedderwick are in the same field based on a position it previously took before the Patent Office. Prelim. Resp. 15. Specifically, Patent Owner points to an Office Action Response filed by Petitioner Precision Planting in prosecuting one of its own patent applications, in which Precision Planting argued that Koning is not directed to a seed planter for row crops, and that an ordinarily skilled artisan would not look to Koning in seeking to improve uniformity of seed placement for row crops. Prelim. Resp. 14 (citing Ex. 2001, 318–19). Judicial estoppel is an equitable doctrine, designed to “protect the integrity of the judicial process” by “preven[ting] a party from prevailing in one phase of a case on an argument and then relying on a contradictory argument to prevail in another phase.” *Haggart v. Woodley*, 809 F. 3d 1336, 1345 (Fed. Cir. 2016) (quoting *Davis v. Wakelee*, 156 U.S. 680, 689 (1895)). On the current

record, we are not persuaded that judicial estoppel bars Petitioner from the arguments concerning Koning in the Petition. Patent Owner does not cite any authority squarely holding that judicial estoppel is applicable in Board proceedings. The only Board decision Patent Owner cites, *Merck Sharp & Dohme Corp. v. Microspherix LLC*, IPR2018-00393, Paper 43, at 16–20 (PTAB July 8, 2019), declined to apply judicial estoppel because its elements were not present on the facts of that case.

Even assuming that judicial estoppel is applicable in Board proceedings, on the current record, we find adequate for this stage of the proceeding Petitioner’s point that the prosecution arguments were made under a legal standard for obviousness that was modified by the Supreme Court’s subsequent decision in *KSR*, such that its arguments during prosecution are not clearly inconsistent with its current position. *See* Reply 3–4; *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 415 (2007) (holding that teaching, suggestion, motivation test for obviousness was overly rigid and inconsistent with the expansive and flexible approach that the Supreme Court’s obviousness precedents require). In addition, “judicial estoppel only binds a party to a position that it advocated and successfully achieved.” *SkyHawke Techs., LLC v. DECA Int’l Corp.*, 828 F.3d 1373, 1376 (Fed. Cir. 2016 (citing *Zedner v. United States*, 547 U.S. 489, 504 (2006))). Because the prosecution arguments concerning Koning were accompanied by claim amendments, and the Examiner did not specify reasons for allowance, it is unclear on the present record whether Precision Planting was successful in persuading the Examiner of its arguments regarding Koning. *See* Reply 4 (citing Ex. 2001, 289, 299, 322–24). This

analysis of the judicial estoppel argument is based on the current record; the parties may address this issue during the trial, in accordance with our rules.

Next, Patent Owner argues that Koning's brush belt could not be successfully combined into Hedderwick's system. Prelim. Resp. 17–21. Patent Owner argues that Koning's bristles do not extend upward from the surface that conveys seed, but instead hang above the conveying surface, and have a stiffness suitable for holding potatoes. *Id.* at 19. Thus, Patent Owner contends that an ordinarily skilled artisan “would find it unreasonable to expect that merely swapping Koning's brush belt . . . ‘for Hedderwick's finned endless belt’ would result in an operable ‘seed delivery system’ as required by the claims.” *Id.* at 20. On the current record, we agree with Petitioner that Patent Owner's arguments go to the issue of whether specific embodiments of the references can be physically combined, which is not the relevant question for obviousness. *See* Reply 6. “The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.” *Hologic, Inc. v. Minerva Surgical, Inc.*, 764 Fed. Appx. 873, 880 (Fed. Cir. 2019) (quoting *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012)).

Patent Owner also argues that the proposed modification would change the principle of operation of both Koning and Hedderwick. Prelim Resp 22–25. Specifically, Patent Owner argues that merging Koning's bristles into Hedderwick would disregard Koning's teaching that the purpose of the bristles is to “hold the potatoes lying on the conveying members 23.” *Id.* at 23 (quoting Ex. 1004, 5:8–14). As to Hedderwick's principle of operation, Patent Owner argues that Hedderwick's finned belt system is

designed so that a seed is released into a single cell, but Koning's bristles do not create cells. *Id.* at 23–24. Further, Patent Owner argues that Hedderwick's finned belt alone carries the seeds to the ground, but in Koning "the conveying members — not the belt with brush bristles — is primarily responsible for supporting and conveying potatoes to the ground." *Id.* at 24–25.

On the current record, these arguments do not persuade us that the proposed combination runs contrary to Hedderwick's principle of operation. In Petitioner's proposed combination, "Koning's brush belt would capture the seeds from the disc and hold the seeds in place with respect to each other as it delivers the seeds to the ground." Pet. 50 (citing Ex. 1004, 3:12–22). In essence, Koning's brush belt carries out the same function in the proposed combination that the finned belt performs in Hedderwick: keeping the seeds in a spaced relationship to each other as they follow the path of the belt. Although Petitioner's proposed modification does alter the operation of the base reference in some ways (as is true in any proposed combination), we are not persuaded that the proposed modification alters Hedderwick's principle of operation or frustrates its purpose. *See, e.g., KSR*, 550 U.S. at 420–21 ("The idea that a designer hoping to make an adjustable electronic pedal would ignore Asano because Asano was designed to solve the constant ratio problem makes little sense.").

Another argument Patent Owner presents is that the advantage provided by Koning's brush is unnecessary, and that Petitioner's challenge is based on "the flawed premise that a person of ordinary skill in the art would recognize a problem in Hedderwick in need of a solution." Prelim. Resp. 25. This argument is not persuasive because a party asserting obviousness need

not show that there was a known problem with the prior art system in order to articulate the required rational underpinning for the proposed combination. “For the technique’s use to be obvious, the skilled artisan need only be able to recognize, based on her background knowledge, its potential to improve the device and be able to apply the technique.” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1003–04 (Fed. Cir. 2016). Petitioner has cited disclosure from Koning and testimony from its declarant to support its argument that an ordinarily skilled artisan would have been motivated to combine Koning with Hedderwick “to obtain the disclosed benefit of greater seed control provided by Koning’s brush belt.” Pet. 37; Ex. 1002 ¶¶ 73, 76; Ex. 1004, 3:12–22, 5:8–14.

To summarize, to prevail in its obviousness challenge, it may not be necessary for Petitioner to show a motivation to combine Koning with Hedderwick because Koning may not be needed to teach any feature of claim 1. If Koning is necessary, we determine, based on the current record, that Petitioner has articulated a reason to combine Hedderwick with Koning that is supported by rational underpinnings.

(2) Motivation – Benac

Petitioner notes that Benac, like Hedderwick, discloses a seed meter that uses a vacuum to retain seeds in apertures in a disk. Pet. 33 (citing Ex. 1003, 1:32–35; Ex. 1005, 3:15–19). Petitioner points to Benac’s teaching that seeds can become jammed in the suction orifices, and that its paddle wheel is used to sweep the orifices “such that the seeds are necessarily extracted.” *Id.* at 33–34 (citing Ex. 1005, 2:18–20, 5:4–8). Petitioner contends that an ordinarily skilled artisan would have been motivated to incorporate Benac’s paddle wheel into Hedderwick’s seed

meter disc “to achieve Benac’s disclosed benefits of using a paddle wheel with a vacuum meter, including that it reliably removes seeds from the metering disk.” *Id.* at 34 (citing Ex. 1002 ¶ 70).

Patent Owner counters that the proposed combination would change Hedderwick’s principle of operation, because Hedderwick relies on a synchronized handoff between disc 130 and belt 134. *See* Prelim. Resp. 28. In Hedderwick, Patent Owner asserts, the seeds are dropped into cells defined by fins of the disc, where they are held until they reach the end of drop off lip 108. *See id.* at 30 (providing annotated and magnified version of Figure 2 of Hedderwick). Consistent spacing between seeds is provided by the cells, as well as the fact that drop off lip 108 is positioned past bottom dead center, which causes each seed to slide in its cell against the fin. *Id.* at 31 (citing Ex. 1003, 3:67–73). Patent Owner contrasts that operation with Benac, in which seeds are dropped directly from the disk to the ground, and the paddle wheel spins faster than the disk so that it imparts a rearward velocity to the seeds when released. Pet. 32–33. Patent Owner argues that “[f]orcing Benac’s paddles (designed to impart additional velocity to the seed) into [Hedderwick’s] sequence would interfere with the synchronized falling of seeds into the cells formed by belt 134 as intended by Hedderwick.” *Id.* at 33.

On the current record, we are not persuaded that the combination violates Hedderwick’s principle of operation. As noted previously in connection with Koning, obviousness turns on what the combined teachings of the references would have suggested, not whether the physical structures of the two references can be entirely combined. *See Mouttet*, 686 F.3d at 1332. Here, the teaching from Benac that Petitioner proposes to add is a

paddle wheel that scrapes seeds from orifices to prevent unwanted jamming. *See* Pet. 33–34. We do not understand Petitioner to be proposing to incorporate all aspects of Benac, such as the teaching to impart additional rearward velocity to the seeds. Rather, Petitioner explains the combination as follows:

As the paddle wheel . . . sweeps the orifices of the seed meter disc, it guides the seeds through the opening in the housing into the bristles of the endless member (formed by substituting Koning’s brush belt for Hedderwick’s finned belt) at the point where “the edge of disc 130 mates with orifice 141 through casing 137.

Pet. 65. Thus, in this proposed combination, synchronicity between cells of the disc and cells in belt 134 does not appear to be critical. Similar to the discussion of Patent Owner’s arguments that the modification based on Koning improperly changes the principle of operation, Petitioner’s proposed combination with Benac changes certain aspects of Hedderwick’s operation, but we are not persuaded that it defeats Hedderwick’s overall intended purpose.

Patent Owner also argues that the advantage provided by Benac’s paddle wheel is unnecessary or redundant. Prelim. Resp. 35–37. Specifically, Patent Owner argues that Hedderwick’s teachings that using a strong vacuum makes fins unnecessary “strongly suggests that, contrary to Petitioners’ assumption, seed jamming is not a problem faced in Hedderwick’s preferred embodiment of Figure 4, which includes fins” *Id.* at 36. Moreover, “[i]f seed jamming were a concern, a person of ordinary skill would appreciate the option of lowering the vacuum pressure and relying on fins 131 to assist in the handoff from disc 130. . . .” *Id.* at 37. However, it is unnecessary for Petitioner to show that seed jamming was a

known problem in Hedderwick's particular system to support the argument that an ordinarily skilled artisan would have been motivated to seek to apply Benac's teachings regarding preventing seed jamming in orifices of vacuum disks. *See Unwired Planet*, 841 F.3d at 1003–04. The proposed combination also need not be the best or most preferred way of preventing seed jamming in order for the asserted motivation to be sufficient. *See Novartis Pharm. Corp. v. West-Ward Pharm. Int'l Ltd.*, 923 F.3d 1051, 1059 (Fed. Cir. 2019) (“[O]ur case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention.”).

On the current record, we determine that Petitioner has an adequate reason to combine Hedderwick with Benac.

b. Independent Claims 4 and 6

Independent claims 4 and 6 include limitations similar to claim 1. Claim 4 differs from claim 1 in that the seed delivery system is “located transversely adjacent” the metering disk, and in that the endless member moves the seed “in cooperation with the housing.” Claim 6 differs from claim 1 in that the endless member “trapping the seed between the endless member and the housing.” Petitioner's contentions regarding claims 4 and 6 are similar to those discussed above for claim 1. *See Pet.* 72–84. At this stage of the proceeding, Patent Owner has not presented any argument concerning claims 4 and 6 separate from those discussed above in connection with claim 1. *See Prelim. Resp.* 5–37.

c. Dependent Claims 2, 3, 5, 7, and 8

Petitioner asserts, with detailed citations to the record, that the proposed combination teaches each of the additional limitations of dependent claims 2, 3, 5, 7, and 8. Pet. 68–75, 82–83, and 85. At this stage, Patent Owner does not dispute these assertions, or raise arguments separate from those discussed above with respect to claim 1.

5. Conclusion

Based on the current record, and for purposes of this decision, we determine that Petitioner has shown sufficiently that the combination of Hedderwick, Koning, and Benac teaches the limitations of claims 1–8, and that one of ordinary skill in the art would have had reason to combine the teachings of these references in the proposed manner and would have had a reasonable expectation of success in doing so. Accordingly, we conclude that Petitioner has established a reasonable likelihood of prevailing in its contention that claims 1–8 would have been obvious over Hedderwick, Koning, and Benac.

VII. ORDER

For the reasons given, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), institution of an *inter partes* review of all challenged claims on the ground presented in the Petition is granted;

FURTHER ORDERED that Petitioner is required to file as an exhibit in this proceeding any ruling on claim construction in the Delaware Case within five days of any such ruling; and

IPR2019-01044
Patent 8,813,663 B2

FURTHER ORDERED pursuant to 35 U.S.C. § 314(a) and 37 C.F.R. § 42.4 that notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

PETITIONER:

Grant K. Rowan
Mary V. Sooter
R. Gregory Israelsen
WILMER, CUTLER, PICKERING, HALE AND DORR, LLP
grant.rowan@wilmerhale.com
mindy.sooter@wilmerhale.com
greg.israelsen@wilmerhale.com

PATENT OWNER:

Jay I. Alexander
Peter P. Chen
Rajesh D. Paul
Nicholas L. Evoy
COVINGTON & BURLING LLP
jalexander@cov.com
pchen@cov.com
rajeshd.paul@gmail.com
nevoy@cov.com