

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INARI AGRICULTURE, INC.,
Petitioner,

v.

PIONEER HI-BRED INTERNATIONAL, INC.,
Patent Owner

Case PGR2024-00025
U.S. Patent 11,707,033

PATENT OWNER'S SUR-REPLY

As in the previous PGRs, Petitioner gets the law wrong in each of its asserted grounds of unpatentability, asks the Board to implement special rules for plant utility patents, and makes arguments that are specious. Petitioner once again attempts to hide the deficiencies in its Petition by claiming that Patent Owner (rather than Petitioner) is urging special legal standards for plant utility patents, while simultaneously asking the Board to apply new utility and indefiniteness standards to such patents. Petitioner now adds to this misdirection by backpedaling from its nonsensical §112(f) argument by asserting that it never made arguments it plainly made. And Petitioner attempts to shift the burden by asserting that it is Patent Owner's responsibility to provide caselaw demonstrating that Petitioner's so-called "novel or unsettled legal question" should not be resolved by the Board.

Simply put, Petitioner misapprehends who bears the burden in a PGR. Indeed, Petitioner argues that it is PO's burden to prove non-obviousness against a Petition that failed to establish unpatentability by the more likely than not standard. But PO has no such burden. Petitioner fails to assess what is actually claimed, fails to apply the correct legal standard for obviousness, and provides the Board no factual basis (e.g., proper genotypic or phenotypic analyses) to find the challenged claims unpatentable.

As in the previous PGRs, the only party to this proceeding to conduct an appropriate analysis is PO, despite having no obligation to do so. PO's objective

analysis, which points out the deficiencies in Petitioner’s papers, cannot be the basis for Petitioner to launch more ad hominem attacks. But suffice it to say, the only party “finger pointing” and trying to “pass the buck” here is Petitioner.

The Board should deny the Petition—not only on the merits—but also under its discretionary powers for wasting the Board’s time and resources. *See* 35 U.S.C. §324(a); *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20 at 17-24 (PTAB Mar. 6, 2019) (informative); *see also Hunting Titan, Inc. v. DynaEnergetics Europe GmbH*, PGR2020-00072, Paper 7 at 35-36 (PTAB Jan. 19, 2021) (relying on §324(a) and *Adaptics* to deny institution in PGR where “the vast majority of the grounds of unpatentability proposed by Petitioner are deficient”); *Chevron Oronite Co. v. Infineum USA L.P.*, IPR2018-00923, Paper 9 at 10-11 (PTAB Nov. 7, 2018). There is no good reason to waste the Board’s time and resources on a Petition that asks the Board to consider revamping multiple laws of patentability that the Board does not have the power to do.

I. Petitioner Cannot Prevail on its §101, §112, and §324(b) Grounds

Petitioner’s Grounds 4–6 are meritless and do not warrant institution.

A. Ground 4: Petitioner’s Indefiniteness Arguments Lack Credibility

Petitioner does not address Ground 4 head on. Rather, in a throw-away statement nominally tied to its defense of Grounds 5 and 6, Petitioner strains credulity by accusing PO of “wrongly dwell[ing] on a few stray patents” that

employ the identical “representative seed” language that Petitioner challenges here. Petitioner implies that these patents are irrelevant because they were merely “assigned to Petitioner.” Prelim. Reply 10. But Petitioner’s own patents—which, in fact, show on their faces that Petitioner was the *applicant*—constitute strong and objective evidence that POSAs understand “representative seed” with reasonable certainty. POPR 5, 68–69, 74. It is simply not credible for Petitioner to challenge language as “indefinite” that itself regularly employs.

B. Grounds 5 and 6: Petitioner Fails to Rebut That This Case Does Not Raise “Novel or Unsettled” Legal Questions

Petitioner offers no new insight as to why its “questions” provide the extraordinary grounds of institution it seeks here (i.e., Grounds 5 and 6). Instead, Petitioner attempts to turn the tables on PO—arguing that “PO does not cite any authority addressing §112(b)’s definiteness as to plant utility patents and/or claims reciting ‘representative seed’” and that “[t]his silence confirms that Grounds 5 and 6 raise novel and unsettled legal issues.” Prelim. Reply 10. But the standard for indefiniteness—regardless of technological subject matter— was settled in *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898 (2014). POPR 78–79. Petitioner (unsurprisingly) has no answer as to how the Board can ignore Supreme Court precedent in favor of Petitioner’s requested *different statutory requirement* for plant utility patents.

Next, Petitioner accuses PO of “blatantly mischaracteriz[ing] Petitioner’s position as seeking ‘means-plus-function’ treatment.” Prelim. Reply 10. But calling claim terms “nonce words,” citing seminal means-plus-function cases like *Williamson*, and complaining about lack of “structure” in the specification—as Petitioner did in the Petition—invokes §112(f). Blaming PO for responding to those arguments in kind is gaslighting.

At the end of the day, a petitioner in a PGR cannot simply come up with “questions” (no matter how far-fetched or unsupported), assert without any indicia of support that they will affect a host of other unrelated/distinct patent applications, and then expect the PTAB to institute post-grant review. As PO explained, POPR 78–79, the Office foresaw such machinations and counseled against these extraordinary grounds under §324(b). *See* 77 FED. REG. 48,680, 48,692 (Aug. 14, 2012) (stating that “[t]he expectation is that this ground for a post-grant review would be used sparingly”).

II. Petitioner Cannot Prevail on its Obviousness Grounds

It is *Petitioner’s* burden to establish that the challenged claims would have been obvious over the asserted prior art. To require PO to provide *additional* evidence of non-obviousness (beyond what it already has, whether in the patent specification itself or otherwise) would be improper burden shifting. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1375–76 (Fed. Cir. 2016). Petitioner has failed

to meet its burden and offers the Board no factual basis to find the claims of the '033 patent obvious over its asserted art: Ross (PH1VKM) and Carlone (PH2DYM) in Ground 1 or Heffner (PH487D) in Ground 2.

A. Petitioner—Not PO—Errs Factually

Petitioner seeks to manufacture a factual dispute where none exists. Prelim. Reply 1-2. PO does not try to “deflect the familial relationship” of 1PNZQ23. Inbred maize varieties, whether generated using the older backcrossing technique or the doubled haploid procedure, are separated by more than one generation. EX2004, ¶¶ 34, 40. When two inbred varieties are crossed, their progeny are referred to as the “F1” generation. The resulting F1 plants each have one allele from each parent. But getting from the F1 generation to a new inbred variety requires either the traditional process (to create the “F2” and beyond) or the doubled haploids process (to create the “D1” and beyond). EX2004, ¶ 40. And as depicted in Vanhevel’s Figure 1B, it is at least two generations from the parents to resulting inbreds in the doubled haploid procedure. EX2043, 3; EX2004, ¶ 41. As a result, parents of inbreds, whether generated via traditional or doubled haploid procedures, are “ancestors from generations back.” EX2004, ¶ 34. But regardless of how produced, “[a]rriving at one elite inbred line means discarding thousands or even millions of others along the way.” EX2004, ¶ 42; *see also* ¶¶ 21-50 (describing the basics of corn genetics and phenotypes) and ¶¶ 51-74 (describing

the “massive funnel” from starting F1 crosses to new inbreds).

PO does not argue that “repeatedly crossing the same two plants would make each successive child *more* deserving of a patent than its older siblings.”

Prelim. Reply 3. That more than one sibling—each expected to be genetically and phenotypically distinct—would progress through this massive development funnel highlights their differences and independent value. It cuts against obviousness.

Finally, Petitioner’s “patent thicket” argument is specious. The ’033 patent is directed to *one* inbred maize variety; Petitioner’s prior art patents are also directed to *single* inbred maize varieties. One patent on one inbred maize variety is not a thicket. And the ’033 patent doesn’t prevent Petitioner from developing new inbred varieties of its own using off-patent inbred varieties.

B. Petitioner Has Not Met its Burden to Demonstrate Obviousness

To prevail on its obviousness challenge, *Petitioner* must apply the four Graham factors. *Magnum Oil* at 1375–6; *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966); *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). But Petitioner does not undertake the required *Graham* analysis.

Rather than doing what is required, Petitioner has carried out only a superficial comparison that is wrong on multiple levels: 1) it is with respect to only *some* of the phenotypic characteristics of the claimed variety as described in the words on the pages of the specifications of the ’033 patent; 2) it is against the

entire world of prior art maize varieties in aggregate (as opposed to the asserted prior art); and 3) it compares plants grown under different conditions. Moreover, Petitioner ignores the expected **and demonstrated** genetic differences it could learn by a proper comparison utilizing, for example, the deposited seed.

Having made the choice to rely exclusively on a phenotypic analysis, Petitioner needed to do a proper phenotypic analysis. But as Petitioner's own expert admits, the analysis that he and Petitioner **did** carry out was not sufficient to even establish the alleged similarities that Petitioner relies on, let alone for a proper *Graham* factors analysis. EX1003, ¶¶ 59, 67, 70. And while Petitioner makes much ado for the first time in its Preliminary Reply about the time required to obtain certain data from the plants (Prelim. Reply 6-7), Petitioner could have conducted a genotypic analysis without having to wait for the plants to be grown. POPR, 12-13, 50, 55. Petitioner's argument that it is somehow excused from conducting a proper analysis—because the deposited seeds are only “representative” of the 1PNZQ23 variety—is nonsensical. Prelim. Reply 4-5. Petitioner did not conduct a proper *Graham* factors analysis which dooms Grounds 1 and 2.

Petitioner alleges that “PO errs legally in conflating novelty under §102 with non-obviousness under §103.” But this is misdirection. PO submits evidence of non-obviousness: the biological reality that siblings are expected to be different; the unpredictability in corn breeding; the fact that both 1PNZQ23 and Heffner's

PH487D both made it through a rigorous breeding pipeline; and the actual genetic differences between them. POPR, 32-55.

Petitioner's framing of what is claimed requires the Board to once again blindfold itself to seed deposit, alleging that "[t]he characteristics of the deposited seed are at best unclaimed properties and therefore immaterial to the obviousness analysis." Prelim. Reply 5. The claims of the '033 patent reference the seed deposit, which describes the claimed variety and enables a POSA to make and use it. **That** is black letter law. POPR, 46.

Petitioner never alleges it would have been obvious to a POSA to create the claimed inbred maize variety, 1PNZQ23. Instead, Petitioner argues it would have been obvious to make *a hypothetical maize inbred* with similar phenotypical characteristics to those described in Table 1 of the '033 patent. Pet., 40-44, 53-54. But that is not what is claimed. Simply put, Petitioner has not provided the Board a proper *KSR* analysis to find that the claims of the '033 patent are obvious.

Harmonic Inc. v. AvidTech, Inc. 815 F.3d 1356, 1363 (Fed. Cir. 2016).

C. Nothing in the AIA Statutory Regime Excuses Petitioner's Failure of Proof

Petitioner argues that, because post-grant review "merely involve[s]" reconsideration of an issued patent, requiring Petitioner show its work on obviousness would "impermissibly decouple IPRs and PGRs from the underlying

patent grant” and cause “the burden of patent examination [to] fall[] to the American public post-grant.” Prelim. Reply 7-8. The Federal Circuit squarely rejected this argument in *Magnum Oil*: “It is true that the entire IPR process is one designed as an ‘efficient system for challenging patents that should not have issued.’” *Magnum Oil*, 829 F.3d at 1380-81 (quoting *Cuozzo*, 136 S. Ct. 2144). “But,” the court explained, “it is *still a system that is predicated on a petition* followed by a trial in which the *petitioner bears the burden of proof*.” *Id.* at 1381 (emphases added). And, as the court further explained, nothing in the AIA statutory regime excuses a petitioner from satisfying its burden of demonstrating unpatentability. 829 F.3d at 1381 (stating that, under the statutory framework, “the Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond”). So, if Petitioner’s argument is that it should not bear responsibility to *actually compare* the claimed subject matter to the asserted prior art post-grant—because it is well settled that the Office cannot conduct experiments during examination (Prelim. Reply 7-8)¹—then

¹ Petitioner also doubles down on its allegations that Patent Owner misled the Patent Office during prosecution of other patent applications by failing to respond to Rule 105 requests for information. Prelim. Reply 7, n.3. But as Patent Owner demonstrated in its Preliminary Responses in PGR2024-00019 and -00020, these allegations are unequivocally false.

its complaint is with Congress, not the Board.

PO has never advanced a “radical framework” for obviousness that “cannot co-exist alongside *KSR*.” Prelim. Reply 9. It is PO that considered the correct legal framework under *KSR* where Petitioner did not. POPR, 39-41. Indeed, PO is arguing that Petitioner has not shown the asserted prior art renders the claims obvious under *KSR*. And PO has no responsibility to provide “unexpected utility” (Prelim. Reply 9) when Petitioner has not met even its burden in providing a proper obviousness analysis. *KSR* is flexible; not spineless.

The law does not and never has required that patentee include evidence of non-obviousness within the patent specification itself. Under Petitioner’s preferred (but incorrect) standard, PO would have to anticipate every potential prior-art challenge that an examiner or a challenging party may make (even as to varieties that only *seem* similar based on improper and incomplete hindsight analysis, such as Petitioner’s) and then expend a great amount of time and resources generating data to overcome a case of obviousness that has not been made. Again, this is not what the law requires under any circumstances.

Respectfully submitted,

Date: September 16, 2024

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e)(4), the undersigned certifies that on September 16, 2024, a complete and entire copy of this Patent Owner's Sur-Reply were provided via email, to the Petitioner by serving the email correspondence addresses of record as follows:

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