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 No. PGR2024-00020 Patent No. 11,666,020

PETITIONER'S REQUEST FOR DIRECTOR REVIEW

The Board's denial of institution raises an important question of law and patent policy. The Board improperly pronounced a loophole under which plant breeders can obtain plant utility patents as a matter of right merely by breeding new varieties in which one of the two parents is "proprietary" and the breeder declines to provide information during the patent prosecution process. The decision permits breeders in essence to *register* for utility patent protection merely by combining trade secrets (withheld from the PTO) with indisputable prior art—regardless of whether such work was inventive.

In wrongly rewarding PO for having held back information as a trade secret, the Board wrongly disincentivized such disclosure while neglecting black-letter law that (1) patents and trade secrets are mutually incompatible forms of protection and (2) even "proprietary" activities can be highly relevant—even dispositive—to patentability, including obviousness under §103. Yet the Examiner here had allowed the Challenged Claims after PO responded to a Request for Information and declined to provide any details regarding one of the two parental varieties on the ground that it had never been publicly disclosed.

Aside from blessing patents examined under such enormous blind spots, the Board's decision directly contradicts recent USDA recommendations to the PTO in connection with Executive Order 14036's mandate that the PTO and USDA collaborate to ensure that the patent system does not "unnecessarily reduce

competition in seed...markets beyond that reasonably contemplated by the Patent Act." 86 Fed. Reg. 36987, 36993 (July 14, 2021). The USDA advised the PTO to consider requiring disclosure of "breeding histories or pedigrees back to known and *publicly available parents*" as part of the original disclosure "for utility patents pertaining to plant varieties and traits." The USDA's proposed approach would prevent blind spots of the sort that occurred during examination of the '020 Patent here. By contrast, allowing the Board's denial of institution to stand would risk perpetuating such blind spots and undermining Office training that ostensibly "proprietary" information can be material to patentability and thus can—and should—be requested during examination. *E.g.*, EX1033.

I. BACKGROUND

The '020 Patent claims an inbred corn plant that is the child of an earlier inbred corn plant that PO had previously patented (EX1005, "Smalley") and which PO had likewise already used as the parent to breed numerous other corn plants—including five prior art patents that had issued more than one year before the application's 7/2/21 effective filing date (Petition at 21, 36, citing EX1003, ¶84).

¹ Oct. 8, 2024 USDA Recommendations, at

https://www.ams.usda.gov/sites/default/files/media/Recommendations_to_PTO_fo
r Increasing Research Access to Germplasm.pdf.

While the PTO requested information concerning such siblings during prosecution pursuant to Rule 105, PO refused to provide it. EX1002, 106, 351-352. PO likewise described the claimed plant's other parent as allegedly "proprietary" and declined to provide any further information on the ground that it had "not been made publicly available" (EX1002, 351)—notwithstanding that PO had used this allegedly secret parent to breed a different inbred corn plant for which PO had filed a different utility application (EX1043) the same day as that for the '020 Patent.² The Examiner nevertheless issued a notice of allowance immediately thereafter. EX1002, 358.

Petitioner requested PGR on the ground that the Challenged Claims are unpatentable under §103 in view of Smalley and PO's corresponding Plant Variety Protection Act Certificate disclosing the same parental variety. Petition at 41-53. Petitioner presented evidence that the disclosed properties of the claimed variety closely track those disclosed in the Smalley parent, and further that nothing in the

² The other application issued as U.S. Patent No. 11,696,545, which Petitioner challenged in PGR2024-00023. The Board recently denied institution of PGR2024-00023 in a decision mirroring the denial of institution here and also that in PGR2024-00019 (*see infra* note 3). Director Review of PGR2024-00019 and/or PGR2004-00020 would likewise warrant Director Review of PGR2024-00023.

'020 Patent suggests any variation a POSA would have viewed as surprising or unexpected. Petition at 42 (citing EX1003, ¶¶97-103). Further, Petitioner explained that the Examiner's reason for allowance—namely, that there was allegedly "no motivation *in the prior art*" to cross Smalley—neglected controlling law. Petition at 9 (citing *National Steel Car, Ltd. v. Canadian Pacific Ry., Ltd.*, 357 F.3d 1319, 1337–39 (Fed. Cir. 2004) ("[T]he motivation to combine need *not be found* in prior art references...")). Indeed, failing to consider proprietary information constitutes legal error. *National Steel*, 357 F.3d at 1337 (reversing district court, which had wrongly discounted unpublished internal drawings because they did not constitute prior art: "[T]he prior-art status of the Prichard disclosure and the Lund drawing is not dispositive.").

Given this fundamental legal error, Petitioner also raised a "novel or unsettled legal question that is important to other patents or patent applications" and in particular plant utility claims. §324(b); §42.208(c). Petitioner framed the question whether "if a patent examiner invokes Rule 105 to secure information 'reasonably necessary to properly examine' a patent application, does the burden of production shift to the patent applicant such that the refusal to provide the requested information on the sole basis that it is 'secret' or 'proprietary' precludes further examination under any of the statutory requirements outstanding at the time of the request." Petition at 9-10, 72-88. Petitioner stressed that granting utility

patents on new plant varieties merely because one of the two parent varieties is "proprietary" wrongly impairs competition and is not reasonably contemplated by the Patent Act—notwithstanding black-letter law and the PTO's commitment (EX1023) in response to the President's Executive Order 14036.

In response, PO doubled down on the "proprietary" parent and reasoned that the claimed variety's lineage made it *impossible* to establish obviousness given that "one-half of the parentage of 1PFHC43 is nowhere in the prior art," but instead had been kept behind lock and key (notwithstanding that PO had already used the allegedly secret variety to breed other inbred lines). POPR at 29.

In reply, Petitioner stressed that (1) neither the PTO nor the public had any way to confirm PO's bald assertion and (2) under PO's theory, the fact that PO had withheld the "proprietary" art dictated that PO should win every time because the *Graham* factors cannot be applied. Reply at 1-2. For example, taking the analogy proposed by PO's own expert (EX2004, ¶56), a Labrador Retriever dog breeder could create a limitless patent thicket on inbred Labradors by taking a publicly disclosed champion stud (analogous to Smalley) and repeatedly breeding it with female Labradors kept behind closed doors (analogous to the purportedly "proprietary" PH1VNA). Under PO's erroneous bright-line logic, claims on the offspring Labradors would be immune from § 103 attacks because the female parent dog was "not known in the art," yet "[a] POSA could not arrive at [the

offspring dogs] without it." Reply at 2-3 (quoting POPR at 47).

In sur-reply, PO never denied that its theory would permit utility patent claims on new plant varieties any time a breeder kept one of the parent plants proprietary. PO instead merely reasoned that plant breeding involves a "massive" funnel and is not directly comparable to dog breeding—notwithstanding that PO's own expert had originated the analogy. Sur-reply at 4. But utility patents incentivize the disclosure of inventive concepts that go beyond mere "ordinary innovation." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007). They are not merely a reward for hard work, as the latter approach would "stifle, rather than promote, the progress of useful arts." *Id*.

In rejecting Petitioner's obviousness challenge, the Board nevertheless stressed that Petitioner had "only identified one parent" of the claimed variety and had not demonstrated a reasonable expectation of success "when [the] other parent was not known in the art at the relevant time." Paper 18 at 16-17 ("Petitioner does not address how a person of ordinary skill in the art would have been able to produce the claimed seed, including its unique genotype, without having access to PH1VNA or its genomic and phenotypic information."). Nowhere did the Board address the necessary implications of such logic—that is, allowing plant breeders to obtain utility patent protection as a matter of right merely by combining prior art patents with trade secrets. Nor did the Board otherwise identify any authority for

any sequence and PO likewise failed to disclose sequence information as part of the specification, but instead describes the deposited sample as a mere "exemplary embodiment" (POPR at 42).³

The Board separately rejected Petitioner's "novel or unsettled legal question" under §324(b) on the ground that it was a "policy" matter for the Director rather than the Board. Paper 18 at 33-34. In crediting PO's argument to this effect, the Board did not address Petitioner's emphasis that such logic created a Catch-22 under which any §324(b) ground necessarily fails. Reply at 10 ("PO's logic would create a Catch-22 precluding institution under §324(b). If a petition

³ The Board's denial of institution mirrors the denial in PGR2024-00019. Both make the same fundamental legal errors and threaten the same adverse policy consequences. Petitioner separately seeks Director Review of the denial in PGR2024-00019 because the Board's emphasis on PO's deposit (including crediting PO's related arguments as to the unclaimed genome of such deposit) constitutes an impermissible presumption of patentability that contradicts controlling law and would wrongly subject would-be challengers to the risk of patent infringement charges. Director Review of the denial of institution here (i.e., in PGR2024-00020) would be warranted on this additional basis.

failed to explain why the legal question is important to other patents or applications, patentees would attack it as contrary to the letter of §324(b). And if a petition were to explain why the question matters beyond the petition itself, patentees would dismiss it as a 'policy' matter like PO tries here.")

II. REASONS FOR GRANTING REVIEW

A. The Board's Reliance on the Parent Variety PO Kept Hidden Raises an Important Question of Law: It Constitutes an Impermissible §103 Standard That Wrongly Discourages Disclosure

In rejecting Petitioner's §103 analysis and emphasizing the "proprietary" parent plant that PO had bred with Smalley, the Board pronounced an impermissible new obviousness standard contradicting the fundamental principle that patents and trade secrets are incompatible rights. Atl. Rsch. Mktg. Sys., Inc. v. *Troy*, 659 F.3d 1345, 1357 (Fed. Cir. 2011). That incompatibility is why the PTO not only refuses to permit applicants to withhold information on the ground that it is "proprietary," but further requires such information to be publicly disclosed before patent issuance when it is material to obviousness. MPEP §724.04; EX1033, 24. The PTO's rule also tracks binding precedent that even proprietary information can be highly relevant—even dispositive—to obviousness. *National* Steel, 357 F.3d at 1337 (reversing district court, which had wrongly discounted unpublished internal drawings because they did not constitute prior art: "[T]he prior-art status of the Prichard disclosure and the Lund drawing is not

dispositive.").

Simply put, the Board's analysis wrongly rewards PO for having (allegedly) kept the second parent plant behind closed doors and then failed to provide information even in response to the Examiner's request. As Petitioner stressed and neither PO nor the Board denies, such logic opens a massive loophole allowing artisans to obtain patents as a matter of right by combining trade secrets (withheld from the PTO) with indisputable prior art—regardless of whether such work was inventive. This loophole is of particular concern in the seed industry. By PO's own admission, plant breeders are naturally inclined to restrict access to the inbred seed lines used as parents for new varieties. See Corteva Agriscience LLC v. Inari Agric., Inc., C.A. No. 23-1059-JFM (D. Del.), Second Am. Complaint (Oct. 15, 2024, Dkt. No. 158), ¶33 (noting that inbred seed lines are normally "not sold commercially, and their use is carefully restricted"). Plant breeders may therefore keep inbred lines secret even while commercializing subsequent "hybrid" lines created using the inbreds. As such, as compared to other industries, it is all the more important that the patent system incentivize breeders to disclose inbred lines rather than keeping them under lock and key. Yet the Board's decision does the opposite—wrongly rewarding PO for its failure to disclose the second parent variety.

B. The Board's Reliance on the Parent Variety PO Kept Hidden Raises an Important Question of Policy: It Creates an Enormous Blind Spot for Examiners and Contradicts the USDA's Recommendations in Response to the President's Executive Order

The Board's decision is likewise illogical as a policy matter given the abovenoted perverse incentives discouraging disclosure.

For one, the Board's analysis—ratifying the original Examiner's decision to allow the Challenged Claims even though PO provided no information regarding the second parent and/or any of the claimed plant's siblings—created an enormous blind spot that prevented proper examination. Petitioner's §324(b) ground elaborated at length on this issue and how the available record "wrongly denies Petitioner and other third parties a complete basis from which to assess" the obviousness of plant utility claims. Petition at 86-87 (noting the applicable question in Ex parte C, 27 U.S.P.Q.2d 1492, 1497 (BPAI 1992): "whether or not each parent variety crossed to develop the claimed variety was possessed of desirable characteristics"). The Board never substantively responded, but rather dismissed the issue as a "policy" matter for the Director. Paper 18 at 33-34. By the Board's own acknowledgment, therefore, Petitioner has raised a significant policy question appropriate for the Director's resolution.

Separately but relatedly, the Board's decision contradicts the USDA's recent recommendation that the PTO consider requiring disclosure of "breeding histories or pedigrees back to known and *publicly available parents*" as part of the original

disclosure "for utility patents pertaining to plant varieties and traits." Here, by contrast, the '020 Patent's specification only discloses information regarding <u>one</u> publicly available parent. And the Challenged Claims were immediately allowed upon PO's representation that the other parent was <u>not</u> public. EX1002, 351-352, 358. PO thereby obtained the '020 Patent without having provided "breeding histories or pedigrees back to known and *publicly available parents*." The end result was an enormous blind spot during prosecution—one that would have been avoided had the PTO instead taken the approach subsequently recommended by the USDA.

By contrast, the Board's denial of institution threatens to perpetuate such problems. Examiners—subject to the Board's supervisory authority—could wrongly infer from the decision that they can and should allow plant utility claims even when applicants follow PO's lead and skirt requests for information on the ground that information about parental lines and breeding histories is "proprietary." As Petitioner detailed, such proprietary information can be material to patentability for numerous reasons—including but not limited to motivation to

https://www.ams.usda.gov/sites/default/files/media/Recommendations_to_PTO_fo
r Increasing Research Access to Germplasm.pdf.

⁴ Oct. 8, 2024 USDA Recommendations, at

PGR2024-00020

combine under §103. Petition at 78-84. Yet the Board never even addressed such

law. Nor did the Board even acknowledge related Office training materials related

to requests for proprietary information and stressing that proprietary material

becomes publicly available following patent issuance if material to patentability.

Petition at 8, 74, 77-79, 84, 91 (citing EX1033); see also MPEP §§724.04-724.05.

As such, the Board's denial of institution risks undermining such training and

exacerbating the problem exemplified by the '020 Patent's allowance.

Date: October 24, 2024

/Scott A. McKeown/

Scott A. McKeown, Reg. No. 42,866

12

CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (E)(4)

I certify that on October 24, 2024, I will cause a copy of the foregoing document, including any exhibits or appendices filed therewith, to be served via electronic mail, as previously consented to by Patent Owner, upon the following:

Michael Kane, Reg. No. 39,722 Katie E. Hyma, Reg. No. 75,037 Dexter Whitley, *Pro Hac Vice* Yong (Lucien) Wang, *Pro Hac Vice* Jonathan Singer, *Pro Hac Vice*

Email: PGR58032-0004PS1@fr.com

Date: October 24, 2024 /MacAulay Rush/

MacAulay Rush

Paralegal

WOLF, GREENFIELD & SACKS, P.C.