

Petitioner's Reply to Patent Owner's Preliminary Response
IPR2025-00136
U.S. Patent No. 11,140,841 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Aardevo North America, LLC,
Petitioner

v.

Agventure B.V.,
Patent Owner

Case IPR2025-00136
U.S. Patent No. 11,140,841 B2
Issue Date: October 12, 2021

Title: HYBRID SEED POTATO BREEDING

**PETITIONER'S REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE**

Aardevo submits this preliminary reply to address Patent Owner's arguments under § 325(d). (Paper 6 ("POPR"), 38-54.) The Petition's Grounds and evidence were not previously presented, and the Examiner's overlooking of disclosures of prior art based on Patent Owner's misrepresentations was materially erroneous.

I. THE SAME OR SUBSTANTIALLY THE SAME ART OR ARGUMENTS WERE NOT PREVIOUSLY CONSIDERED

Because the Petition presents Grounds and combinations that were never considered by the Examiner, Patent Owner ("PO") contends that substantially the same arguments were considered. However, none of Petitioner's Grounds and combinations, including those which rely on Phumichai, were specifically considered by the Examiner. Petitioner's supporting expert testimony was also never considered. Hence, the Examiner could not have considered substantially the same arguments. *See, e.g., Samsung Elecs. v. Elm 3DS Innovations*, IPR2016-00388, Paper 11 at 27 (PTAB July 1, 2016); *BMW of North America v. Foras Techs.*, IPR2024-01346, Paper 7 at 20-21 (PTAB Mar. 7, 2025); *SAP Am., v. Clouding IP*, IPR2014-00308, Paper 8 at 22-23 (PTAB July 10, 2014).

PO makes additional arguments that are meritless. First, PO is wrong that Jong was "fully considered." (POPR, 39.) In fact, Jong was never discussed during '841 prosecution and, during '436 prosecution, was only relied on tangentially for a rejection that was withdrawn after PO canceled the rejected claims. (EX2009, 1136,

1175.) On this basis alone, § 325(d) denial should not occur at least as to the Jong-based Grounds. *See BMW*, IPR2024-01346, Paper 7 at 19-20; *Bowtech v. MCP*, IPR2019-00379, Paper 14, 18-19 (PTAB July 3, 2019). Further, Petitioner relies on Jong as anticipating every limitation of Claims 1, 4, and 7. No art considered by the Examiner, including Maris and Phumichai, was argued to be anticipatory. (*See, e.g.*, EX1010, 0447-449); *Keysight Techs. v. Centripetal Networks*, IPR2022-01525, Paper 9 at 61-62 (PTAB Apr. 17, 2023). PO is also wrong that Jong's disclosures are cumulative to Phumichai's. (POPR, 39-43.) Jong provides several unique disclosures, including specific strains, teachings about breeding methods, and yield results which, together with Phumichai, render the Claims obvious. (*See, e.g.*, Pet., 29, 55-58; EX1002, ¶¶106-109, 222-237.) And while Examiner considered Phumichai, he clearly erred in misapprehending its teachings due to PO's arguments.

Second, it is undisputed that Spooner, Chase, Springer, and Bamberg were never considered. PO is wrong that the Examiner considered substantially the same arguments as Petitioner's based on these references. (POPR, 47-52.) Arguments based on Spooner clearly were not considered; had they been, the Examiner would not have erred in believing that *S. phureja* and *S. tuberosum* were distinct species. *See infra* Section II. For Bamberg, none of the considered references disclosed the specifically claimed agronomically desirable traits recited in the dependent claims,

as Bamberg does. (Pet., 31, 40.) Similarly, Springer's specific teachings as to the importance of genetic distance to achieving heterotic benefit are nowhere in the Examiner's references. (Pet., 31, 49-50; EX1002, ¶¶123, 206-207, 215.)

PO argues that Chase's teachings were considered because Examiner found obvious a breeding scheme in pending Claim 41, a claim supposedly similar to the challenged Claim 5. However, Petitioner presents Chase as expressly disclosing every step of the inbreeding method in Claim 5 and as teaching the general applicability of diploid "Analytical Breeding" to all polyploid plants, decades before the '841 Patent. (Pet., 12-15, 30-31, 45; EX1002, 38-51 (¶¶69-70).) The Examiner was correct that Claim 5's backcrossing steps are "routine," but that does not mean that similar arguments based on Chase were considered. (EX1010, 0449.)

Finally, even if certain broad strokes of Petitioner's arguments were generally similar to those considered by the Examiner, these arguments should be viewed in the broader context of prosecution history and asserted Grounds and combinations in this Petition. "[S]ome overlap in arguments will likely always occur because the same claims are being analyzed." *BMW*, IPR2024-01346, Paper 7 at 23.

II. THE EXAMINER ERRED MATERIALLY DURING PROSECUTION

The prosecution history shows that PO's incorrect argument that *S. phureja* is not part of *S. tuberosum* species prevented the Examiner from correctly understanding the teachings of Phumichai. (Pet., 26-29; EX1002, ¶¶93-100.)

PO's argument that the Examiner "did not accept Agventure's point" is factually wrong. During '436 prosecution, PO amended Claim 1 by adding "of the species *Solanum tuberosum*" to overcome a prior art rejection based on Maris and Phumichai. (EX2009, 0481.) PO then repeatedly advanced a supposed species distinction between *S. phureja* and *S. tuberosum*, in its effort to overcome obviousness rejections based on Maris and Phumichai. (*Id.*, 0493, 0560, 0642, 0645 ("plants of Phumichai are not *S. tuberosum* plants"), 0967, 0989.) Inventor Lindhout also declared that back-crossing *Sli*-gene into *S. tuberosum* was new, unlike back-crossing into *S. phureja*, a meaningless and misleading distinction since *S. phureja* was understood as being of the *S. tuberosum* species. (*Id.*, 0681; EX1002, ¶¶93-95.)

The Examiner did accept PO's contentions. For example, the Examiner withdrew all of his obviousness rejections "in view of Applicant's amendments to the claims, arguments and the Lindhout declaration." (*Id.*, 0717-18; 0723.) Nothing in the record shows that the Examiner understood *S. phureja* to be of the *S. tuberosum* species. PO points to an Examiner statement that Phumichai "teaches using diploid self-incompatible *S. tuberosum* plants." (POPR, 53.) However, this overlooks that the Examiner also expressly stated, in the last rejection prior to '436 issuance, that work from the Phumichai group disclosing *Sli*-gene crossing into *S. phureja* "does not mention crossing to *S. tuberosum*," which shows he continued to

wrongly accept PO's false species distinction. (EX2009, 0914-15.) Moreover, the record demonstrates only that the Examiner found developing a line from the species *Solanum tuberosum*" obvious "in view of, e.g., the importance of [*Solanum tuberosum*] in world agriculture" and based on a general discussion of *S. tuberosum* in the abstract of Phumichai. (*Id.*, 0529, 1136.) Those citations are beside the point since the Examiner did not understand—because of PO's arguments—that the *S. phureja* lines developed and crossed in Phumichai are *S. tuberosum*. This false species distinction caused him to overlook the relevance of Phumichai's teachings to the pending claims, thus committing a material error. *See Bayer Cropscience LP v. Corteva Agriscience LLC*, IPR2023-01038, Paper 12 at 72-73 (PTAB Dec. 19, 2023) (finding material error when the Examiner withdrew a rejection based on information presented by Patent Owner).

The same misrepresentations were made to the same Examiner during the '841 prosecution. (Pet., 26-28.) The Examiner again erroneously allowed the claims over Phumichai when PO amended a claim to recite "of the species *Solanum tuberosum*" to overcome an obviousness rejection. (EX1010, 0447-49, 1029.) That the Examiner withdrew his rejection based on this amendment (especially given the '436 prosecution history) shows that the Examiner misunderstood Phumichai by accepting PO's arguments, and thus materially erred.

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Respectfully submitted,

COOLEY LLP
ATTN: Patent Group
1299 Pennsylvania Avenue NW
Suite 700
Washington, DC 20004
Tel: (650) 843-5287
Fax: (650) 849-7400

By: / Daniel J. Knauss /
Daniel J. Knauss, J.D., Ph.D.
Reg. No. 56,393
Counsel for Petitioner

CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. Sections 42.6, that a complete copy of the attached **PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE** is being served via electronic mail on March 21, 2025, upon Patent Owner by serving Patent Owner's counsel of record in this proceeding as follows:

Joseph A. Loy
W. Todd Baker
Shaoyao Yu
KIRKLAND & ELLIS LLP
jloy@kirkland.com
todd.baker@kirkland.com
shaoyao.yu@kirkland.com

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/ Daniel J. Knauss /
Daniel J. Knauss
Reg. No. 56,393
COOLEY LLP
1299 Pennsylvania Ave. NW,
Suite 700
Washington, D.C. 20004
Tel: (650) 843-5287