

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ADVANCELL PTY LTD.,
Petitioner,

v.

SCIENCONS, AS,
Patent Owner.

Case No. PGR2025-00040
Patent 12,249,437

PATENT OWNER'S PRELIMINARY SUR-REPLY

The POPR addressed, as is appropriate, the petition challenge advanced based on “three possible constructions.” Pet. 5. The proffered constructions were confusing and inconsistent, introduced new and unexplained terminology, and sometimes had no accompanying explanation at all (e.g., “third construction”). POPR 6-13. The Reply (Paper 8) now adds further confusion with new argument while the petition is barely an afterthought. Such argument effectively seeking a “re-do” of the petition after Patent Owner has already filed its responsive POPR is improper and unduly prejudicial, and the Reply should be struck from the record. At a minimum, any new argument should be given no weight. Even if considered, Petitioner still fails to establish the cited prior art satisfies the challenged claims under any of the various arguments. Institution should be denied.

I. NEW “CONFIGURED TO BE” ARGUMENT

Based solely on one reference to the specification, the petition construed “fluidly coupled” identically for independent claims 1 and 16, as “selectively fluidly coupled” or “capable of being connected or linked together using a gas.” Pet. 4; POPR 7-8. The Reply now ignores claim 16 and argues that claim 1 (element 1c) recites a “two-configuration capability” in which there alternately is or is not fluid coupling. Reply 1. Even if considered, the argument is flawed as least in limiting consideration to fluid coupling while ignoring the “gas tight seal” it acknowledges elsewhere as required by the claimed “configuration.” *See, e.g.,*

Reply 2. The Reply does not dispute that both “fluidly coupled” and “gas tight seal” are recited in limitation 1c, yet fails to discuss a “configuration” that satisfies both. Instead, the petition and Reply limit discussion to (1) a “first configuration” where the isotope source is not fluidly coupled or (2) a “second configuration” that lacks “a gas tight seal” when one is admittedly required. Petitioner still fails justify mapping to prior art with, at best, either a gas tight seal in the absence of fluid coupling, fluid coupling in the absence of a gas tight seal of the cited volume, or no gas tight seal at all (Norman).

II. THIRD CONSTRUCTION

Arguing it is not “clear which part of limitation 1c is modified by ‘with a gas tight seal,’” the Reply purports to discuss the “three possible constructions” presented in the petition (Pet. 5-8). But the Reply departs from the petition argument in favor of new argument. This starts with the Reply’s question of what allegedly is being modified by “gas tight seal.” The petition alleged “three possibilities” as “‘configured to,’ ‘fluidly coupled,’ or ‘volume.’” Pet. 5. The Reply now argues “gas tight seal” modifies either (1) “configured to be fluidly coupled” (Reply §A); (2) “a volume” (Reply §B); or (3) “a collector surface” (Reply §C). The Reply’s discussion of each “possibility” only makes matters worse, adding both confusion and improper new argument.

The Reply (2-4) begins discussion of the “third construction” but ignores the

criticisms raised in the POPR. As the POPR noted (12-13), there was no justification for its the third construction, whereas the petition argument was divorced from the language of the claims and introduced various different terms/concepts (e.g., “selectively couple,” multiple different volumes).

Rather than address the petition’s proffered “third construction,” the Reply pivots to argument different. *Compare* Reply 2-4, *with* Pet. 5. The Reply now argues for a “change in the configuration of the generator,” which is language not found in the petition or in claim 1. While the petition argued “to selectively couple” one volume with another different volume (not reflecting the challenged claims), the Reply now quietly ignores its two volume theory. The Reply vaguely argues “non-fluidly coupled and fluidly coupled configurations” but doesn’t explain what is coupled in these configurations. The Reply also newly offers color-coded and annotated Figures 4A/4B not found in the petition—there was no argument at all in the petition. *See* POPR 12-13 (“no justification whatsoever”).

The new colorings neither explain the understanding of the claim language nor rationally identify the “distinct spaces” it claims. It colors the gas-tight cap differently from the inside of the collector vial, even though it is a solid surface outside the top of the collector vial, rather than a different interior space. And it colors the piston’s interior a third color (yellow), even though its within the collector vial. This coloring also contradicts the specification, which explains that

rather than extending out of the cap as colored, the piston's interior is sealed at the top. EX1001, 18:19-24; *see id.*, Figs. 2, 3A-B, 5A-B (interior ends at sealed cap).

The Reply concedes that the prior art it maps to these color-coded figures (rather than the actual claim language) also lacks a seal when there is fluid coupling, so these mappings fail as well. *See* Reply 3-4 (arguing coupling only when valve open, lacking seal). Accordingly, the Reply's arguments should be rejected as both misplaced (figures versus claims) and improperly new.

III. FIRST CONSTRUCTION

The Reply inconsistently asserts that in the first construction, gas tight seal “modifies ‘a volume’” and “the claimed generator has a volume with a gas tight seal.” The term “generator” is in the claim preamble, whereas limitation 1c recites “a volume.” Adding confusion, the Reply introduces three different volumes. Reply 4 (“the volume includes both the volume...and the volume...”). The Reply now states the first construction is independent of the “two configurations.” Reply 4. The petition never mentioned “the claimed generator” and specifically argued “a gas-tight seal that selectively fluidly couples” for the first construction. Pet. 5.

The Reply is also inconsistent with the petition, which unequivocally mapped the claimed volume to Hassfjell-Hoff's lower chamber and Norman's chamber 12 in grounds 1-4. *See* Pet. 20 (“the lower chamber (i.e., the claimed volume)”), 51 (“the second chamber 12 (a volume)”). The POPR addressing what

is specifically argued in the petition is hardly “inapposite.” Reply 5. Petitioner concedes that Norman’s “second chamber 12” mapped in the petition lacks a gas-tight seal and has no source “inside.” Reply 4-5; POPR 25-26. Likewise, the Reply (5) newly points to the whole Hassfjell-Hoff generator (annotated “yellow, blue, and beige”), ignoring the lower chamber (annotated beige and blue) identified in the petition. The Reply’s arguments are unsupported in the petition and still fail.

IV. SECOND CONSTRUCTION

The Reply does not dispute that the petition failed to meet its burden for any prior art grounds under the second construction. Reply 5. Nor does it resolve contradictory statements or the unsubstantiated negative limitation requiring the “entire volume” not to have a gas tight seal. See Pet. 5-6; POPR 11-12. Lacking such justification, Petitioner’s arguments under the second construction fail as well. The Reply (5) also newly argues alleged inconsistency with Fig. 4A/B makes the claim indefinite. Of course, no embodiment could be consistent with the petition’s construction requiring a volume both with and without a seal. It is the inconsistency in Petitioner’s arguments that undermine meeting its burden; proposing inconsistent constructions does not show indefiniteness.

Accordingly, the Reply’s arguments should be rejected and institution should be denied.

Respectfully submitted,

Date: September 03, 2025

/ Michael T. Rosato /

Michael T. Rosato, Lead Counsel

Reg. No. 52,182

CERTIFICATE OF SERVICE

I certify that the foregoing Patent Owner's Preliminary Sur-Reply was served on this 3rd day of September, 2025, on Petitioner at the following electronic service addresses:

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