

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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TENNANT COMPANY,

*Petitioner,*

v.

OXYGENATOR WATER TECHNOLOGIES, INC.,

*Patent Owner.*

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Case IPR2021-00625

Patent No. RE 45,415

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**PETITIONER TENNANT COMPANY'S OPPOSITION TO  
PATENT OWNER'S MOTION FOR ADDITIONAL DISCOVERY**

As Petitioner stated during the Parties' teleconference with the Board, Petitioner has no objection to Patent Owner's Requests (1) and (4) as they relate to the prior art at issue in this I.P.R. Those are the only legitimate discovery materials sought by Patent Owner in this motion. The remainder of Patent Owner's requests seek materials outside the scope of the instituted I.P.R., including materials expressly protected as litigation work product under Federal Rule of Civil Procedure 26(b)(4). Because Petitioner is already in the process of producing the only materials Patent Owner is legitimately entitled to, the motion should be denied.

**I. Patent Owner's Attempt to Obtain Discovery Regarding Testing of Other Prior Art References from the District Court Litigation is Improper**

As Petitioner has repeatedly informed Patent Owner, Petitioner has no objection to Patent Owner's Requests (1) and (4) as they relate to the prior art at issue in this I.P.R. (*i.e.*, the Wikey and Davies references). (*See* Ex. 2115 at 1, 3, 5.) Petitioner is in the process of producing those materials and anticipates that production will be complete by the end of this week. (*See id.* at 1.)

The sole dispute regarding Requests (1) and (4) is Patent Owner's attempt to obtain discovery regarding Dr. Tremblay's evaluation of *other* prior art references in connection with the parties' district court lawsuit that are not part of this I.P.R.

(See Paper No. 21 at 3.) Such attempts to obtain discovery of Petitioner’s litigation positions are improper in an I.P.R. See *Garmin Int’l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2021-00001, Paper No. 26, 2013 WL 11311697, at \*7 (P.T.A.B. March 5, 2013) (precedential) (“In Factor (2), we indicate that asking for the other party’s litigation positions and the underlying basis for those positions is not necessary in the interest of justice.”).

Patent Owner identifies two cases as allegedly supporting the idea that a party in an I.P.R. may seek document discovery regarding an opponent’s evaluation of prior art that is not cited or discussed in the I.P.R. (See Paper No. 21 at 5.) Neither case supports Patent Owner’s position.

First, Patent Owner cites the Board’s decision in *Adobe Inc. v. RAH Color Technologies LLC*, IPR219-00627, Paper 59 at 4 (P.T.A.B. Dec. 12, 2019). The *Adobe* decision does not deal with written discovery at all. That decision addressed questions posed *at a deposition*, in which the expert was asked (a) whether he had performed any prior art searches, (b) whether he had considered any prior art claim charts before he signed his declaration, and (c) whether he determined that any of the prior art provided to him by the Petitioner failed to render the challenged claims obvious. See *id.*, Paper 59 at 3. The Board allowed those as deposition questions, because they were asked at a high level and did not delve into the *substance* of the prior art that the expert considered:

Questions 1–3 each seek information about whether Dr. Poynton reviewed or considered a document or documents (e.g. prior art search, claim chart, or references) in preparing his testimony. The questions ***do not seek the substance*** of any communication between Dr. Poynton and Petitioner’s attorneys and ***do not, for example, seek information regarding the specific content*** of any prior art search that may have been conducted or claim chart that may have been reviewed.

*Id.*, Paper 59 at 4-5 (emphasis added). The Board also noted that while the expert’s consideration of prior art outside the scope of the I.P.R. may have been irrelevant to the I.P.R., irrelevance alone is not a basis for instructing a witness not to answer a *deposition* question. *See id.*, Paper 59 at 5.

In this case, Patent Owner *does* “seek information regarding the specific content” of other prior art that Dr. Tremblay may have evaluated in the district court litigation, and what the conclusions of that analysis were. Also, unlike responding to a generalized deposition question, irrelevance *is* a basis for denying additional document discovery in an I.P.R. *See Garmin*, 2013 WL 11311697, at \*3 (“The essence of Factor (1) is unambiguously expressed by its language, *i.e.*, the requester of information should already be in possession of a threshold amount of evidence or reasoning tending to show beyond speculation that something useful will be uncovered. ‘Useful’ in that context does not mean merely ‘relevant’ and/or ‘admissible.’”). Thus, under the express reasoning of the *Adobe* decision, Patent Owner’s request to obtain document discovery regarding Dr. Tremblay’s

evaluation of prior art references that were not considered as part of his opinions in this I.P.R. should be denied.

Patent Owner also cites *Yeda Research & Dev. Co. v. Abbott GMBH & Co.*, 292 F.R.D. 97 (D.D.C. 2013), as allegedly supporting the argument that an expert's evaluation of uncited prior art is discoverable in an I.P.R. *Yeda* stands for no such proposition.

As a preliminary matter, *Yeda* does not address discovery in an I.P.R. at all. *Yeda* addresses a district court review of a patent interference. *See id.* at 100. That proceeding applied district court discovery rules. As the Board has made clear, “in *inter partes* review, discovery is limited as compared to that available in district court litigation.” *Garmin*, 2013 WL 11311697, at \*3. Furthermore, the discovery at issue in *Yeda* resulted from a party's decision to use one of the inventors on its patent application as both a consulting expert in the interference and as a testifying expert in the district court lawsuit. *See Yeda*, 292 F.R.D. at 102-03. The court expressly acknowledged that the expert's work as a consultant was protected litigation work product, and “unless the privilege was later waived, documents prepared by Dr. Engelmann as Yeda's consultant in connection with the 2003 experiments are protected from discovery by the work product privilege.” *Id.* at 112. The court found that Yeda had waived the privilege by subsequently using the same expert to take litigation positions directly contrary to the positions it had

taken in the interference proceeding. *Id.* at 112-115.

None of those issues are at play here. Patent Owner has not argued that Dr. Tremblay's I.P.R. declaration is a work product waiver with regard to his evaluation of different prior art in the district court lawsuit, nor could it. Patent Owner has likewise failed to identify any decision of the Board allowing document discovery in an I.P.R. regarding an expert's litigation evaluation of prior art that is outside the scope of the instituted I.P.R.

At best, Patent Owner appears to be arguing that if Dr. Tremblay had performed testing of different prior art references in the district court lawsuit that conflicted with the testing results or opinions presented in this I.P.R., that information might be discoverable pursuant to 37 C.F.R. § 42.51(b)(1)(iii). Petitioner states that no such inconsistent testing or evaluation of other prior art references exist. Petitioner is aware of and in compliance with its obligations under 37 C.F.R. § 42.51(b)(1)(iii).

Accordingly, Patent Owner's request to seek discovery regarding Dr. Tremblay's district court litigation evaluation of prior art not cited in the instituted I.P.R. should be denied.

**II. Patent Owner's Requests (2) and (3) are Unsupported by the Board's Prior Decisions and Violate Federal Rule of Civil Procedure 26(b)(4)**

Patent Owner's Requests (2) and (3) attempt to discover all correspondence

between Petitioner’s counsel and Dr. Tremblay “referring” to the reconstruction or testing of the prior art, including any “suggestions” or “advice” counsel may have expressed. (Paper No. 21 at 1.) Those requests run directly afoul of Federal Rule of Civil Procedure 26(b)(4) and dramatically exceed the discovery authorized in the *Apple* case cited by Patent Owner.

The relevant portions of Federal Rule of Civil Procedure 26(b)(4) are reproduced below:

*Trial Preparation: Experts. ...*

(B) Trial-Preparation Protection for Draft Reports or Disclosures. Rules 26(b)(3)(A) and (B) protect drafts of any report or disclosure required under Rule 26(a)(2), regardless of the form in which the draft is recorded.

(C) Trial-Preparation Protection for Communications Between a Party’s Attorney and Expert Witnesses. Rules 26(b)(3)(A) and (B) protect communications between the party’s attorney and any witness required to provide a report under Rule 26(a)(2)(B), regardless of the form of the communications, except to the extent that the communications:

- (i) relate to compensation for the expert’s study or testimony;
- (ii) identify facts or data that the party’s attorney provided and that the expert considered in forming the opinions to be expressed; or
- (iii) identify assumptions that the party’s attorney provided and that the expert relied on in forming the opinions to be expressed.

Fed. R. Civ. P. 26(b)(4)(B)-(C). The Advisory Committee notes for the 2010 amendments to Rule 26(b)(4) make it clear that the current version of the Rule was crafted “to provide work-product protection against discovery regarding draft

expert disclosures or reports and – with three specific exceptions – communications between expert witnesses and counsel.” Fed. R. Civ. P. 26 Comm. Notes (2010), available at [https://www.law.cornell.edu/rules/frcp/rule\\_26](https://www.law.cornell.edu/rules/frcp/rule_26).

The Committee Notes explain:

Rule 26(b)(4)(B) is added to provide work-product protection under Rule 26(b)(3)(A) and (B) for drafts of expert reports or disclosures. ...

Rule 26(b)(4)(C) is added to provide work-product protection for attorney-expert communications regardless of the form of the communications, whether oral, written, electronic, or otherwise. The addition of Rule 26(b)(4)(C) is designed to protect counsel’s work product and ensure that lawyers may interact with retained experts without fear of exposing those communications to searching discovery. ...

Rules 26(b)(4)(B) and (C) do not impede discovery about the opinions to be offered by the expert or the development, foundation, or basis of those opinions. For example, the expert’s testing of material involved in litigation, and notes of any such testing, would not be exempted from discovery by this rule.

*Id.* Thus, as the Committee Notes make clear, Patent Owner is legitimately entitled to discovery of the assumptions made in an expert’s testing and the results of that testing, but Patent Owner **may not** broadly seek discovery of the communications between counsel and the expert discussing the testing.

The requests authorized by the Board in the *Apple* case cited by Patent Owner are precisely the types of materials allowed by Rule 26(b)(4):

- (i) the directions from Dr. Hwang to The Singapore Institute of Manufacturing Technology (SIMTech) specifying the

verification studies referenced in Dr. Hwang's declaration (Ex. 2013) conducted by SIMTech in connection with this proceeding,

- (ii) the test reports or other raw data provided by SIMTech after conducting the requested verification studies and that underlies the figures and tables in the expert declarations submitted by Dr. Hwang and Dr. Suhir[.]

*Apple Inc. v. Singapore Asahi Chem. & Solder Indus.*, IPR219-00377, Paper 22 at 3-4, 16 (P.T.A.B. Oct. 21, 2019). Notably, the allowed *Apple* requests cover the instructions provided by the expert to the testing laboratory and the testing results provided by the lab that were relied on by the expert. *Id.* Neither request even attempted to obtain the communications between the experts and the party's counsel discussing the testing, though presumably such communications would have existed (as they do in virtually every case). *Cf. id.*

During the Parties' call with the Board, Patent Owner asserted that the scope of its Requests (2) and (3) tracked the discovery authorized in the *Apple* case. (*See* Ex. 2115 at 6.) They do not. Petitioner has repeatedly asked Patent Owner to either (a) identify a decision of the Board that actually authorizes the discovery sought in Requests (2) and (3) or (b) conform its requests to discovery that the Board's prior decisions have authorized. (*See id.* at 1, 3, 5.) Patent Owner has refused to do either. (*See id.* at 1.)

Applying the discovery requests authorized in the *Apple* case to the expert opinions in this I.P.R. results in the following requests:

- (i) the directions from Dr. Tremblay to any testing laboratories or other entities involved in the recreation and testing referenced in Dr. Tremblay's declaration (Ex. 1103) in connection with this proceeding,
- (ii) the test reports or other raw data provided by any testing laboratories or other entities after conducting the requested recreation and testing and that underlies the expert declaration submitted by Dr. Tremblay.

Petitioner has no objection to either of those discovery requests. To the extent that those *Apple* requests are not co-extensive with the materials Petitioner has already agreed to produce in response to Requests (1) and (4), Petitioner is voluntarily collecting and producing such materials. Petitioner anticipates completing the production by the end of this week.

Accordingly, the Board should deny Patent Owner's Requests (2) and (3), which seek discovery that is not supported by the Board's prior decisions and would violate the work product protection created by the 2010 amendments to Federal Rule of Civil Procedure 26(b)(4).

### **III. Patent Owner's Argument in a Footnote Improperly Attempts to Expand the Scope of 37 C.F.R. § 42.51(b)(1)(iii)**

In a footnote, Patent Owner asserts that the Board should "order Petitioner to produce" any "information that *unspecified variables* impact bubble formation and size" as Routine Discovery pursuant to 37 C.F.R. § 42.51(b)(1)(iii). (*See* Paper No. 21 at 1 n.1.) It is well-established that cursory arguments raised in footnotes

and not fully developed are deemed waived. *See, e.g., Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1383 (Fed. Cir. 2015); *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006).

Accordingly, the Board should disregard Patent Owner's footnote and deem the argument waived.

Regardless, Patent Owner's interpretation of Routine Discovery under 37 C.F.R. § 42.51(b)(1)(iii) has been expressly rejected by the Board:

Routine discovery under 37 C.F.R. § 41.51(b)(1)(iii) is narrowly directed to specific information known to the responding party to be inconsistent with a position advanced by that party in the proceeding, and not broadly directed to any subject area in general within which the requesting party hopes to discover such inconsistent information. Cuzzo's attempt to label very broad discovery requests as narrowly tailored routine discovery is misplaced.

*Garmin*, 2013 WL 11311697, at \*2.

Here, Patent Owner is apparently asking the Board to order Petitioner to comb through every document related to electrolysis in the possession of either Petitioner or Dr. Tremblay for any reference to any "unspecified variable" that could hypothetically have some impact on the "formation and size" of oxygen bubbles. That request stretches far outside the scope of the challenged '415 patent and the analysis performed by Dr. Tremblay.

The challenged '415 patent identifies three variables that allegedly impact the size of bubbles formed by electrolysis – the spacing between the electrodes, the

power source voltage, and the current:

the anode electrode is separated at a critical distance from the cathode such that the critical distance is from 0.005 inches to 0.140 inches,

the power source produces a voltage no greater than about 28.3 volts and an amperage no greater than about 13 amps

(Ex. 1101 at Cl. 13.) The '415 patent asserts that the formation of “microbubbles”

and “nanobubbles” inherently results from making an electrolysis system

according to “special dimensions” for these variables disclosed in the patent:

The present invention produces microbubbles and nanobubbles of oxygen via the electrolysis of water. ... In the special dimensions of the invention, as explained in more detail in the following examples, O<sub>2</sub> forms bubbles which are too small to break the surface tension of the fluid. These bubbles remain suspended indefinitely in the fluid and, when allowed to build up, make the fluid opalescent or milky. ...

It was found that electrolysis took place at very short distances before arcing of the current occurred. Surprisingly, at slightly larger distances, the water became milky and no bubbles formed at the anode, while hydrogen continued to be bubbled off the cathode. At distance of 0.140 inches between the anode and cathode, it was observed that the oxygen formed bubbles at the anode. Therefore, the critical distance for microbubble and nanobubble formation was determined to be between 0.005 inches and 0.140 inches.

(*Id.* at 4:27-54.)

It is not hard to imagine that there are variables not identified in the '415 patent that could cause the electrolysis systems described in the '415 patent and the prior art to malfunction. For example, if someone attempted to operate the devices in a vacuum chamber, with water heated close to boiling, or with chemicals added

to the water that interfered with the electrolysis reaction, there would likely be an impact on the devices' ability to form oxygen bubbles. None of those far-fetched scenarios are contemplated by the '415 patent, nor do they have any impact on what the cited prior art expressly and inherently teaches to a person skilled in the art. These are certainly not "specific information known to [Petitioner] to be inconsistent with a position advanced by" Petitioner or Dr. Tremblay.

If Patent Owner wishes to pursue an argument that some "unspecified variable" is necessary to meet the patent claims, its expert witness is capable of making that argument without help from Petitioner or Dr. Tremblay. *See, e.g., Garmin*, 2013 WL 11311697, at \*7 (noting that the Patent Owner "can rely on its own analysis of the state of the art or on the opinions of independent analysts" without needing to rely on information from the Petitioner). Of course, if Patent Owner were to successfully convince the Board that some "unspecified variable" were necessary to practice the '415 patent claims, it would likely render the claims invalid for lack of written description or enablement in the process.

As noted above, Petitioner is aware of and in compliance with its obligations under 37 C.F.R. § 42.51(b)(1)(iii). Patent Owner's attempt to dramatically expand the scope of 37 C.F.R. § 42.51(b)(1)(iii) through a footnote is contrary to the Board's precedent and should be rejected. Patent Owner's motion for additional discovery should be denied in its entirety.

Dated: October 11, 2021

/s/ R. Scott Johnson

R. Scott Johnson

Reg. No. 45,792

Lead Counsel for Petitioner

**CERTIFICATE OF SERVICE**

Pursuant to 37 C.F.R. § 42.6(e) and the agreement of the parties, the undersigned certifies that on October 11, 2021, a true and correct copy of the foregoing was served via email on the following:

Nathan Louwagie  
NLouwagie@carlsoncaspers.com  
OWT@carlsoncaspers.com

Larina Alton for Schwegman Lundberg & Woessner, P.A.  
Larina.Alton@maslon.com

By: /s/ R. Scott Johnson  
R. Scott Johnson  
Reg. No. 45,792

Dated: October 11, 2021