

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CARGILL, INCORPORATED,
Petitioner,

v.

BUNGE LODERS CROKLAAN USA, LLC,
Patent Owner.

IPR2024-01360
Patent 7,645,473 B2

Before GRACE KARAFFA OBERMANN, KIMBERLY McGRAW, and
DEBRA L. DENNETT, *Administrative Patent Judges*.

DENNETT, *Administrative Patent Judge*.

DECISION

Denying Petitioner's Request for Rehearing of
Decision Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Petitioner filed a Request for Rehearing (Paper 17, “Rehearing Request” or “Reh’g Req.”) of the Decision Denying Institution of *Inter Partes* Review (Paper 16, “Decision” or “Dec.”) of claims 1, 6–9, and 11–24 (“the challenged claims”) of U.S. Patent No. 7,645,473 B2 (Ex. 1001, the “’473 patent”). We refer to the Petition (Paper 2, “Pet.”), the Preliminary Response (Paper 11, “Prelim. Resp.”), the Preliminary Reply (Paper 12, “Prelim. Reply”), and Preliminary Sur-reply (Paper 13, “Prelim. Sur-reply”).

Upon request for rehearing, we assess a decision on institution “for an abuse of discretion” (37 C.F.R. § 42.71(c) (2020)), which occurs when a “decision was based on an erroneous conclusion of law,” “clearly erroneous factual findings,” or “a clear error of judgment.” *PPG Indus. Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1567 (Fed. Cir. 1988) (citations omitted). The burden of showing a decision should be modified lies with the party challenging the decision. 37 C.F.R. § 42.71(c) (2020). The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply. *Id.* Thus, a request for rehearing is not an opportunity merely to disagree with the Board’s assessment of the arguments or weighing of the evidence, or to present new arguments or evidence.

We have reviewed Petitioner’s Rehearing Request and carefully considered all the arguments presented. For the following reasons, we are not persuaded that we misapprehended or overlooked any arguments or evidence.

II. BACKGROUND

The '473 patent is directed to a vegetable fat composition comprising glycerides and to its applications in baked products and iced confectionary products. Ex. 1001, 1:6-8. The '473 patent discloses a purported improved vegetable fat composition with specific amounts of S₃, SUS, SSU, SU₂, and U₃ triglycerides ("S" representing a saturated fatty acid residue with 16 to 24 carbon atoms, and "U" representing an unsaturated fatty acid residue with at least 18 carbons). *Id.* at 2:10–20. The composition can be a blend of commercially available fats, including an interesterified palm olein and canola oil, with component amounts selected to achieve the claimed triglyceride composition. *Id.* at 3:6–15; 4:53-55.

III. DISCUSSION

The Petition advances two grounds of unpatentability, each based on obviousness and asserting Petrauskaite as the primary or sole prior art reference. Pet. 13, 42. For both grounds, Petitioner argues that Petrauskaite in view of knowledge generally available in the art discloses all limitations of claim 1 (the only challenged independent claim) except for "a weight ratio of interesterified SUS/SSU that is between 0.5 and 2.0," which Petitioner argues is disclosed by knowledge generally available in the art. *Id.* at 22–31, 42.

Petitioner contends the Decision overlooked the legal standards for hindsight bias, misapprehended or overlooked the significance of iodine values, and misapprehended the evidence in dismissing one of only two finite options disclosed in Petrauskaite for determining the mole percentage of a triglyceride. Reh'g Req. 2–3.

A. Hindsight Reconstruction

To determine the weight percentage (“wt%”) of classes of triglycerides (S₃, SUS, SSU, SU₂, and U₃) based on the molar percentages (“mol%”) of S₃, SU₂, and U₃ disclosed in Petruskaite, Petitioner employs a series of calculations using data of particular examples taken from several different prior art sources that are not listed in the grounds and are portrayed as merely “documentary evidence.” *See id.* at 15. It is Petitioner’s use of the documentary evidence and data contained therein that raises the question of “What would motivate a person of ordinary skill in the art” (a “POSITA”) “to combine this particular information to create the claimed composition?”

According to the Petition, “[a] POSITA would have been motivated to find and combine references disclosing the fatty acid distribution of palm stearin and soybean oil with the disclosure of Petruskaite’s interesterified Pst/SBO fat blends” “because this information was readily available and well-known in the art.” Pet. 38.

As discussed in the Decision, “obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (citing *InTouch Technologies, Inc. v. VGO Communications, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014)). No matter the result of combining the allegedly “readily available and well-known” information taken from particular examples from the “documentary evidence” with Petruskaite’s disclosure, a POSITA had to have been motivated to do so at the time the

invention was made.¹ What is missing from the Petition is the “why.” The only motivating force in this case appears to be hindsight spurring Petitioner on to choose particular examples of palm stearin disclosed in Deffense and the soybean oil in Neff in order to justify its assertion that Petrauskaite discloses the claimed wt% ranges of triglyceride classes.

Petitioner argues that the Decision overlooks the appropriate legal standard for hindsight bias, quoting the well-known case of *In re McLaughlin*:

Any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure, such a reconstruction is proper.

443 F.2d 1392, 1395 (CCPA 1971). Reh’g Req. 3–4.

Here, the claimed wt% ranges of S₃, SUS, SSU, SU₂, and U₃ triglycerides are “knowledge gleaned only from the applicant’s disclosure.” Petitioner urges that a POSITA need merely convert mol% of triglycerides in a specific fat blend into wt% of triglycerides in the specific fat blend. *See* Pet. 14–15 (“[T]he wt% of Petrauskaite’s fat blends can easily be calculated based on the generally available prior art knowledge of fatty acid compositions of palm stearin and soybean oil.”). But, Petitioner did not sufficiently show a reason to choose the particular palm stearin and soybean oils having the fatty acid compositions that would result in Petrauskaite’s fat blends meeting the claimed triglyceride levels. “Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior

¹ The pre-AIA version of 35 U.S.C. § 103 applies here.

art relevant to obviousness.” *Ecolchem, Inc. v. Southern Cal. Edison Co.*, 227 F.3d 1361, 1372 (Fed. Cir. 2000); *see also Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed. Cir. 2012) (“[W]hen someone is presented with the identical problem and told to make the patented invention, it often becomes virtually certain that the artisan will succeed in making the invention.”). “[T]he inventor’s own path itself never leads to a . . . conclusion of obviousness; that is hindsight.” *Univ. of Strathclyde v. Clear-Vu Lighting LLC*, 17 F.4th 155, 165 (Fed. Cir. 2021). We are cautioned not to view the invention “after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made.” *Sensonics Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996) (citing *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138 (Fed. Cir. 1985)).

From this perspective, we find nothing other than hindsight reconstruction that gives a reason for a POSITA to choose (1) the fatty acid composition in Deffense of a specific palm stearin, and (2) the fatty acid composition in Neff of soybean oil. As a factfinder, we must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.” *KSR Int’l v. Teleflex, Inc.* 550 U.S. 398, 421 (2007). Petitioner and Dr. Marangoni “read into the prior art the teachings of the invention at issue.” *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966). Petitioner points to no design need, no market pressure, nothing else to *motivate* POSITA to *modify* Petrauskaite’s disclosure such that Petrauskaite’s fat blends would have the same fatty acid compositions of a specific palm stearin from Deffense and soybean oil from Neff. As explained in the Decision, there are multiple soybean oils and palm stearin

compositions that do not have the same weight percentage of fatty acids as those in the selected compositions from Deffense and Neff. *See* Dec. 16–17.

Petitioner’s contention that the Decision overlooks legal standards for hindsight bias is unpersuasive.

B. Iodine Values

The Rehearing Request relies heavily on iodine values (IV), stressing that hindsight was not involved in making the combination of references/knowledge because Petruskaite discloses a “soybean oil having an IV of 134.3 and a palm stearin fraction having an IV of 26.0 *which provided the motivation* to select a soybean oil and a palm stearin having similar IV values.”² Reh’g Req. 7 (emphasis added). Petitioner argues that “it was common sense for a POSITA, and for Petitioner, to select known soybean oils and palm stearins that have the closest physical properties to those components disclosed in Petruskaite.” *Id.* at 8.

The Rehearing Request’s statement regarding motivation is missing from the Petition.

In the Rehearing Request, Petitioner attempts to demonstrate that the Petition directed us to the significance of IVs by pointing to portions of the Summary of Applied Prior Art reporting that “Petruskaite relies on a soybean oil having an iodine value (IV) of 134.3 and a palm stearin having

² For the record, we note that a POSITA could not have been motivated to select the soybean oil in Neff based on the IV of soybean oil disclosed in Petruskaite because Neff does not *disclose* the IV of soybean oil. To suggest otherwise proposes that the tail wag the dog. The IV can only be ascertained by taking the information in Neff on fatty acid composition and employing another reference to calculate the IV based on “the potential number of iodine atoms added to each fatty acid or triglyceride” according to a data table in the additional reference. *See* Ex. 1020.

an IV of 26.0.” (Pet. 6), “Neff discloses the fatty acid distribution of a soybean oil having an IV of 132.6” (*id.* at 7), and “Deffense discloses the wt% of the various saturated and unsaturated fatty acids of a palm stearin having an IV of 24.9” (*id.* at 8).

Reading Petitioner’s statement in the Petition that “the IV value [of the soybean oil in Neff] is determined by adding proportions of the wt% of all triglycerides comprising unsaturated fatty acids that make up soybean oil” (Pet. 7–8) could mislead the reader into understanding that Neff itself discloses the IV of the soybean oil; it does not. The IV value for soybean oil in Neff is calculated using Neff’s fatty acid composition with information from other references. *See id.* In the Rehearing Request, Petitioner urges that “the Petition highlighted that soybean oils and palm stearins having IVs similar to those referenced in Petrauskaite were part of the general knowledge in the art, *e.g.*, the soybean oil of Neff disclosed in Table 1 and the palm stearin fraction of Deffense in Table IV.” Reh’g Req. 11. Petitioner adds that “[c]hoosing the soybean oil of Neff disclosed in Table 1 having an IV of 132.6 and the palm stearin fraction of Deffense having an IV of 24.9 were clear choices for providing interesterified fat blends that achieve the requirements of Petrauskaite’s commercially useful shortenings, margarines, and confectionary fat basestocks based on the teachings of Petrauskaite and not the ’473 patent.” *Id.* at 11–12.

Our view of the record generates a perspective that differs from Petitioner’s. We find no instance in the Petition in which “motivation” and “iodine value” are discussed together or linked in any way. The same can be said of Dr. Marangoni’s declaration. And, as noted in the Decision, it was not until the Preliminary Reply that Petitioner argued that specific data on

fatty acid wt% used for the conversion calculations were selected to represent “knowledge generally available to one of ordinary skill in the art” due to similarity of the iodine value (“IV”) of the palm stearin (and soybean oil) disclosed in Petruskaite. *See* Prelim. Reply 2–3. New evidence or argument in the Preliminary Reply that could have presented earlier is not permitted.

On this record, we find Petitioner relies its Rehearing Request on arguments about a motivation to combine, stemming from the significance of iodine values, that were not raised in the Petition. Accordingly, Petitioner fails to support that the Decision misapprehended or overlooked arguments in the Petition about the significance of iodine values.

C. Calculated versus Experimental Triglyceride Values

Petitioner argues that the Decision misapprehends the law on obviousness when there are a finite number of predictable solutions for obtaining triglyceride values. Reh’g Req. 13. Petitioner portrays one of ordinary skill in the art as having to select from only two interesterified fat blends disclosed in Petruskaite. *Id.* at 14. According to Petitioner, the Decision erred in dismissing Petruskaite’s experimentally derived interesterified fat blends. *Id.*

The Decision did not dismiss Petitioner’s calculations of wt% of triglyceride classes in Petruskaite based on experimentally-derived data in favor of data generated according to the random distribution hypothesis. *See* Dec. 19. Rather, the Decision determined that Petitioner’s choice to use the experimentally-derived data (which ultimately produced triglyceride wt% that met the claimed limitations (Ex. 1003, ¶¶ 79, 87, 92, 96)), instead of the random distribution hypothesis-generated data (which ultimately produced

triglyceride wt% that did not meet the claimed limitations (Ex. 2001, ¶¶ 129–34)), was further evidence of hindsight reconstruction, where Petitioner leaves unexplained its decision to do so. Dec. 19. This conclusion is further supported by Petitioner’s rejection of Petrauskaite’s data resulting from Random Distribution Hypothesis because “it was unclear how the theoretical [calculated] values were determined” (Prelim. Reply 3), while simultaneously relying on random distribution in Hustedt to calculate wt% of SUS and SSU (*See* Pet. 22–24).

IV. CONCLUSION

For the foregoing reasons, Petitioner does not persuade us that we overlooked or misapprehended any matter, or show sufficiently that denying institution was an abuse of discretion.

V. ORDER

In consideration of the foregoing, it is
ORDERED that Petitioner’s Request for Rehearing is *denied*.

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PETITIONER:

Todd Walters
Mythili Markowski
James Moore
BUCHANAN INGERSOLL & ROONEY PC
todd.walters@bipc.com
mythili.markowski@bipc.com
james.moore@bipc.com

PATENT OWNER:

Tate Tischner
Bryan Smith
TROUTMAN PEPPER HAMILTON SANDERS LLP
tischnet@pepperlaw.com
bryan.smith@troutman.com