

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

L'ORÉAL USA, INC.,
Petitioner,

v.

UNIVERSITY OF MASSACHUSETTS,
Patent Owner.

Case IPR2018-00778
Patent 6,423,327 B1

Before CHRISTOPHER G. PAULRAJ, ROBERT A. POLLOCK, and
DAVID COTTA, *Administrative Patent Judges*.

COTTA, *Administrative Patent Judge*.

DECISION
Denying Petitioner's Request for Rehearing
37 C.F.R. § 42.71(d)

I. INTRODUCTION

L'Oréal USA, Inc. ("Petitioner" or "L'Oréal") filed a petition requesting an *inter partes* review of claims 1–7 and 9 of U.S. Patent No. 6,423,327 B1 (Ex. 1001, "the '327 patent"). Paper 2 ("Pet."). The University of Massachusetts ("Patent Owner" or "UMass") filed a Preliminary Response to the Petition. Paper 7 ("Prelim. Resp."). On

September 7, 2018, after consideration of the Petition and Preliminary Response, we entered a Decision denying institution of *inter partes* review Paper 9 (“Dec.”). On October 11, 2018, Petitioner filed a Corrected Request for Rehearing (Paper 11, “Req. Reh’g”) seeking reconsideration of the Decision.¹

For the reasons stated below, Petitioner’s Request for Rehearing is denied.

II. ANALYSIS

Standard of Review

When reconsidering a decision on institution, we review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion may be found if a decision is based on an erroneous interpretation of law, if a factual finding is not supported by substantial evidence, or if the decision represents an unreasonable judgment in weighing relevant factors. *Star Fruits S.N.C. v. U.S.*, 393 F.3d 1277, 1281 (Fed. Cir. 2005); *Arnold P’ship v. Dudas*, 362 F.3d 1338, 1340 (Fed. Cir. 2004); *In re Gartside*, 203 F.3d 1305, 1315–16 (Fed. Cir. 2000). The party requesting rehearing has the burden of showing the decision should be modified, which includes specifically identifying all matters the party believes we misapprehended or overlooked. 37 C.F.R. § 42.71(d).

¹ Petitioner filed a Request for Rehearing on October 9, 2018. Paper 10. Because the request was incorrectly captioned, with the permission of the Board (Ex. 3002), Petitioner refiled a request for rehearing correcting this clerical error. Paper 11. All citations herein are to the Corrected Request for Rehearing.

Background

Petitioner challenged claims 1–7 and 9 of the '327 patent on three related grounds: that claims 1, 3–7, and 9 are anticipated by DE '107²; that claims 1, 3–7, and 9 are obvious over DE '107; and that claims 1–7 and 9 would have been obvious over the combination of JP '153³ and DE '107. Pet. 11–12. We declined to institute *inter partes* review. Dec. 15–19.

Petitioner's Request for Rehearing focuses on our construction of the limitation in claim 1 requiring that "the adenosine concentration applied to the dermal cells is 10^{-4} M to 10^{-7} M." In the Petition, Petitioner argued that this limitation should be construed to mean "a concentration of adenosine ***in the composition*** that is topically applied to an unbroken, epidermal layer of a region of the skin containing the dermal cells to be from 10^{-4} M to 10^{-7} M (*i.e.*, 0.00000265 to 0.00265 wt %)." Pet. 27. In the Decision denying institution, we rejected Petitioner's proposed construction and construed this limitation to mean "mean what it says – that the recited concentration is the concentration that is applied to the dermal cells." Dec. 15.

Legal Principles

For the reasons discussed in connection with our institution decision, we applied a district court-type claim construction like that provided in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Dec. 6.

² Schönrock et al., DE 195 45 107 A1, published June 5, 1997 ("DE '107"). DE '107 was originally published in German. Ex. 1003. All citations herein are to Exhibit 1004, the English translation of DE '107 provided by the Petitioner.

³ Murayama, JP H9-157153 A, published June 17, 1997 ("JP '153"). JP '153 was originally published in Japanese. Ex. 1005. All citations herein are to Exhibit 1006, the English translation of JP '153 provided by the Petitioner.

Under this standard, we gave claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art, at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *Phillips*, 415 F.3d at 1313. We also considered the extrinsic evidence presented by Petitioner. *Id.* at 1317. Petitioner does not challenge our decision to apply the *Phillips* claim construction standard. Req. Reh’g 2.

Analysis

Claim 1 of the ’327 patent, the only independent claim, requires “topically applying to the skin a composition comprising a concentration of adenosine.” In the Decision, we construed this limitation to require that “a composition be applied directly to the outer, epidermal layer of the skin that is intact . . . such that the inner, dermal layer of the skin is not exposed.” Dec. 7–8. Petitioner agrees that this is the correct construction. Req. Reh’g 4.

Claim 1 also requires that “the adenosine concentration applied to the dermal cells is 10^{-4} M to 10^{-7} M.” In the Decision, we construed this limitation to require that the recited concentration is “the concentration that is applied to the dermal cells.” Dec. 15. Petitioner argues that we “incorrectly applied *Phillips* by interpreting only two words of the claim, *i.e.* ‘dermal cells,’ in isolation, overlooking the remaining language of the claims and therefore failing to accord sufficient weight to the specification and file history or Petitioner’s evidence.” Req. Reh’g 2. We are not persuaded.

Any construction of the phrase “concentration applied to the dermal cells” must ascribe some meaning to the term “dermal cells.” As discussed

in the Decision, there is no dispute that the skin is comprised of multiple layers, including the epidermis, the dermis, and subcutaneous fat. Dec. 8–9. Our construction gives the term “dermal cells” its ordinary meaning by construing it to refer to “dermal cells”—i.e., the dermis or dermal layer. We do not find in the record, and Petitioner does not suggest, another way to interpret the limitation “concentration applied to the dermal cells” consistent with the ordinary meaning of the words “dermal cells.”

Petitioner proposes that we construe the limitation “concentration applied to the dermal cells” to mean “a concentration . . . applied to an unbroken, epidermal layer of a region of the skin containing the dermal cells.” Pet. 27. However, as noted in the Decision, there is no meaningful difference between the “epidermal layer of a region of the skin containing the dermal cells” recited in Petitioner’s proposed claim construction, and the epidermis. Dec. 9 n.4. Petitioner’s proposed construction is, thus, contrary to the language of the claim, because it changes the meaning of “dermal cells” to “epidermal cells.”

Petitioner argues, in effect, that the ordinary meaning of the term “dermal cells” changes when it is considered “within the context of the immediately-preceding words ‘*applied to*,’ and the *single recited application step*.” Req. Reh’g 3. According to Petitioner, there is only one step in claim 1 in which adenosine is “applied” and that step requires application to the skin (which we interpreted to mean the epidermal layer of the skin). Petitioner contends the claim term “applied” in the limitation “applied to the dermal cells” must be understood to refer back to this step of applying adenosine to the epidermal layer of the skin because, otherwise,

“the language ‘***the adenosine concentration applied***’ would lack antecedent basis.” *Id.* at 4. We are not persuaded.

As discussed in the Decision, the Specification discloses not only that adenosine may be topically applied to the epidermal layer of the skin, but also that adenosine so applied will penetrate the epidermis to reach the dermal layer. Dec. 10 (citing Ex. 1001, 5:13–14 (“For topical application, the penetration of the adenosine into skin tissue may be enhanced by a variety of methods known to those of ordinary skill in the art.”)). Topical application of adenosine will, therefore, result in adenosine being brought into contact with both the epidermis and the dermis. As also discussed in the Decision, the specification provides examples in which a concentration of adenosine matching the high end recited in the claims (10^{-4} M) is applied directly to dermal cells (fibroblasts), suggesting that the inventors considered it desirable for the dermal cells to receive the claimed concentration of adenosine. *Id.* In this context, the meaning of claim 1 is clear: adenosine is first topically applied to the epidermal layer of the skin and, only after it penetrates this outer skin layer, is a specific concentration (10^{-4} M to 10^{-7} M) of the adenosine “applied” to the dermal cells.

Petitioner argues that our construction is incorrect because it “concludes that ‘applied to the dermal cells’ means ‘reached’ or ‘received by’ the dermal cells, or ‘penetrates through’ the skin to reach the dermal cells.” Req. Reh’g 12. Petitioner asserts that “[s]uch an interpretation improperly alters the meaning of ‘topically applying’ and ‘applied.’” *Id.*

This argument, however, fails to account for the context provided by the Specification which, as discussed above, teaches that adenosine will penetrate the skin. Particularly when considered in this context, we do not

read the term “applied” so narrowly as to exclude an application which reaches its target destination (here the “dermal cells”) by passing through a layer that overlies the target destination (here the epidermis). This is consistent with the ordinary meaning of “apply” — i.e., “to bring into physical contact with or close proximity to.” Ex. 3003 (definition 9 from dictionary.com (last accessed Oct. 26, 2018), *see also*, definition 8). Here, adenosine is brought into physical contact with the dermal cells. Nothing in the language of the claims, as interpreted in light of the intrinsic and extrinsic evidence, requires that adenosine be applied *directly* to the dermal cells.

Petitioner argues that we erred in failing to find a prosecution disclaimer. Req. Reh’g 5–10. More particularly, Petitioner argues that our acknowledgement that the Patent Owner “compared prior art concentrations of adenosine that were recited as a percentage of the ***total weight of the composition to the concentration recited in the claims as being ‘applied to the dermal cells’***” requires that we find a prosecution disclaimer. *Id.* at 6 (internal citation omitted). We are not persuaded.

A prosecution history disclaimer must be clear and unambiguous. “[W]hile the prosecution history can inform whether the inventor limited the claim scope in the course of prosecution, it often produces ambiguities created by ongoing negotiations between the inventor and the PTO. . . . Therefore, the doctrine of prosecution disclaimer only applies to unambiguous disavowals.” *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1341 (Fed. Cir. 2012) (citing *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1289 (Fed. Cir. 2009)). A “heavy presumption” exists in favor of the ordinary meaning of claim language. *Bell Atl. Network Servs., Inc. v. Covad*

Commc'ns Grp., Inc., 262 F.3d 1258, 1268 (Fed. Cir. 2001) (internal quotation marks and citation omitted). To overcome this presumption, the patentee must “clearly set forth” and “clearly redefine” a claim term away from its ordinary meaning. *Id.* (internal quotation marks and citations omitted). The disavowal must be “unmistakable” and “unambiguous.” *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1322 (Fed. Cir. 2013). This standard is “exacting.” *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012).

Here, during prosecution, Patent Owner stated that the low end of the range recited in DE '107 (0.001% wt) “corresponds to 3.8×10^{-5} adenosine” which is “between the 10^{-4} M and 10^{-5} M concentrations recited in the claims.”⁴ Ex. 1009, 84. Patent Owner did not use this statement to distinguish the claimed adenosine concentration from a concentration disclosed in the prior art. Rather, Patent Owner used it to support the argument that the “extremely broad range of adenosine concentrations listed in . . . [DE '107] is not supported by reality.” *Id.* More specifically, Patent Owner argued that, although DE '107 disclosed a concentration of adenosine within the recited range, in contrast to the challenged claims, DE '107 taught (incorrectly according to the Patent Owner) that this level of adenosine increases cell proliferation. *Id.*

As recognized in our Decision (Dec. 11), although Patent Owner's comparison of the claimed concentration to a prior art concentration provides some support for Petitioner's proposed construction, it does not

⁴ In our Decision, we cited this statement as an example of Patent Owner comparing the concentration of adenosine recited as a percentage of the total weight of the composition to the concentration recited in the claims as being “applied to the dermal cells.” Dec. 11.

“clearly redefine” the phrase “applied to the dermal cells” or alter the scope of the claims such that the recited concentration of adenosine need not reach the dermal cells. Nor does it disclaim subject matter found in the prior art or, otherwise, “unmistakably” disavow application of the recited concentration to the dermal cells.

This is particularly true when the statement is considered in the context of the prosecution history as a whole. *Ecolab, Inc., v. FMC Corp.*, 569 F.3d 1335, 1342 (Fed. Cir. 2009) (“Even if an isolated statement appears to disclaim subject matter, the prosecution history as a whole may demonstrate that the patentee committed no clear and unmistakable disclaimer.”). Specifically, in arguing that the amount of adenosine recited in DE ’107 does not increase cell proliferation, Patent Owner submitted results from tests in which adenosine was applied directly to dermal cells (fibroblasts) at concentrations of 10^{-4} M and 10^{-5} M. Ex. 1009, 84, 89–90. This suggests that the inventors contemplated dermal cells receiving the recited concentration of adenosine. Patent Owner also relied on these test results as the basis for the statement that “the presently claimed invention is based on the demonstration that the recited concentrations of adenosine do not increase cell proliferation.” Ex. 1009, 84. Again, this suggests that “the recited concentrations of adenosine” — i.e., the concentrations recited in the claim — are those applied to the dermal cells.

In addition, as noted in the Decision, Patent Owner expressly corrected the Examiner when the Examiner stated in the reasons for allowance that the claims were directed to “administering adenosine at a concentration of 10^{-4} M to 10^{-7} M, to the skin,” stating “applicant notes that the claimed concentration of adenosine is applied to the dermal cells.” Ex.

1009, 117 (reasons for allowance) and 123 (Patent Owner’s comments on reasons for allowance). This suggests that the Patent Owner did not intend for the concentration recited in the claims to be the concentration applied to the skin.

In sum, while the prosecution history does include a passage that is arguably consistent with Petitioner’s proposed construction, it does not include an “unmistakable” and “unambiguous” disavowal, and does not “clearly set forth” and “clearly redefine” the phrase “applied to the dermal cells.”

Petitioner argues that our claim construction is erroneous because it “lacks both enablement and written description support.” Req. Reh’g 13. We are not persuaded for the reasons discussed at length in the Decision. Dec. 13–15.

Petitioner argues that we misapplied *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004), “by not affording proper weight to the context of the claim, specification, and file history.” Req. Reh’g 14. More particularly, Petitioner asserts that, in contrast to our Decision, which Petitioner asserts “merely dismiss[es] construction of the challenged claim term as ‘unambiguous,’ the court in *Chef America* properly conducted a thorough analysis of the claim language, specification, and file history to determine that the specification supported, and patentee there intended for, the meaning of the term . . . [at issue] in view of the prosecution.” *Id.* at 14–15. We are not persuaded because, as explained in the Decision, our construction is also supported by the claim language, the specification, and the prosecution history. Dec. 8–15.

Accordingly, Petitioner has not persuaded us that we have misapprehended or overlooked any matters with respect to our decision to deny institution. 37 C.F.R. § 42.71(d).

III. CONCLUSION

For the foregoing reasons, we conclude that Petitioner has not shown that the Board abused its discretion in denying institution of the challenged claims. *See* 37 C.F.R. § 42.71(d).

ORDER

Accordingly, it is

ORDERED that Petitioner's Request for Rehearing is *denied*.

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