

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

L'ORÉAL USA, INC.,
Petitioner,

v.

LIQWD, INC.,
Patent Owner.

Case PGR2017-00011
Patent 9,498,419 B2

Before LORA M. GREEN, BRIAN P. MURPHY, and
CHRISTOPHER M. KAISER, *Administrative Patent Judges*.

KAISER, *Administrative Patent Judge*.

DECISION
Denying Institution of Post-Grant Review
37 C.F.R. § 42.208

INTRODUCTION

A. Background

L’Oréal USA, Inc. (“Petitioner”) filed a Petition requesting post-grant review of claims 1–10 of U.S. Patent No. 9,498,419 B2 (Ex. 1001, “the ’419 patent”). Paper 1 (“Pet.”). Liqwd, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 10 (“Prelim. Resp.”).

We have authority to determine whether to institute a post-grant review. 35 U.S.C. § 324(c); 37 C.F.R. § 42.4(a). The standard for instituting a post-grant review is set forth in 35 U.S.C. § 324(a), which provides that a post-grant review may not be instituted “unless the Director determines . . . it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.”

After considering the Petition and the Preliminary Response, we determine that Petitioner has not demonstrated it is more likely than not that at least one of the claims it challenges is unpatentable. Accordingly, we do not institute post-grant review.

B. Related Matters

The parties identify *Liqwd, Inc. v. L’Oreal USA, Inc.*, No. 1:17-cv-00014 (D. Del.), as a pending infringement suit asserting the ’419 patent. Pet. 1; Paper 7, 1. The ’419 patent also has been challenged in a separate petition for post-grant review, which has been assigned case number PGR2017-00012.

C. The Asserted Grounds of Unpatentability

Petitioner contends that claims 1–10 of the ’419 patent are unpatentable based on the following grounds (Pet. 29–48):¹

Statutory Ground²	Basis	Challenged Claims
§ 112(b)	Indefiniteness	1–10
§ 112(a)	Lack of adequate written description support	1–10
§ 112(a)	Lack of enablement	1–10

D. The ’419 Patent

The ’419 patent “generally relates to formulations and methods for treating keratin in hair, skin, or nails, and in particular for strengthening and/or repairing hair during or after a coloring or permanent wave treatment.” Ex. 1001, 1:16–19. Certain treatments of hair, including dyeing and bleaching, can result in the disulfide bonds of the hair’s keratin being broken, and the ’419 patent expresses “a need for hair formulations and treatments that repair and/or strengthen keratin in hair damaged [by these treatments].” *Id.* at 1:31–2:44. The ’419 patent “provide[s] improved formulations and methods for repairing and/or strengthening damaged hair.” *Id.* at 2:49–51. The formulations of the ’419 patent “may be applied simultaneously with the hair coloring formulation or subsequently to the

¹ Petitioner also relies on a Declaration from Arun Nandagiri. Ex. 1006 (“the Nandagiri Declaration” or “Nandagiri Decl.”).

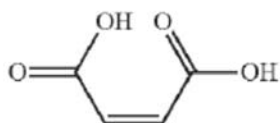
² The relevant post-grant review provisions of the America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), took effect on March 16, 2013. 125 Stat. at 293, 311. Because the application from which the ’419 patent issued was filed after that date, our citations to Title 35 are to its post-AIA version. Section 4(c) of the AIA re-designated 35 U.S.C. §§ 112(1), (2) as 35 U.S.C. §§ 112 (a), (b), respectively, effective September 16, 2012. 125 Stat. at 296–297.

application of the hair coloring formulation.” *Id.* at 17:32–34. These formulations are described as containing “an active agent” that may be any of a large number of compounds, including maleic acid or salts thereof. *Id.* at 7:42–11:18.

E. Illustrative Claim

Of the challenged claims of the ’419 patent, claim 1 is independent and illustrative. It recites:

1. A method for bleaching hair comprising:
 - (a) mixing a formulation comprising an active agent with a bleaching formulation, wherein the active agent has the formula:



or salts thereof;

and

- (b) applying the mixture to the hair;

wherein the active agent in the mixture is at a concentration ranging from about 0.1% by weight to about 50% by weight; and

wherein the mixture does not contain a hair coloring agent.

Ex. 1001, 25:42–26:5.

ANALYSIS

A. Claim Construction

In a post-grant review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.200(b).

Claim terms also are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

The parties' disagreement revolves around the meaning of the phrase "wherein the mixture does not contain a hair coloring agent." Pet. 6–50; Prelim. Resp. 16–41. This phrase is recited in claim 1 of the '419 patent, and it is a limitation of claims 2–10 by virtue of their dependence from claim 1. Ex. 1001, 25:42–26:53; 37 C.F.R. § 1.75(c). Petitioner argues that this phrase should be interpreted as "wherein the mixture does not contain any amount of any substance that alters or changes, or is capable of altering or changing, the color of hair." Pet. 6–28. Patent Owner argues that this phrase should be interpreted as "wherein the mixture applied to the hair does not have a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection." Prelim. Resp. 16–35.

Essentially, the parties disagree about whether a "hair coloring agent" should be interpreted as limited to a "colorant or pigment that is customarily used in hair care products" or as a "substance that alters or changes, or is capable of altering or changing, the color of hair." The former interpretation, proposed by Patent Owner, is a subset of the latter interpretation, proposed by Petitioner. The latter interpretation would include bleaching agents that lighten hair by destroying existing pigments but that do not change hair color by depositing a colorant or pigment into the hair. Pet. 7–8.

Petitioner argues that its proposed construction is supported by the written description of the '419 patent, the prosecution history, and statements made by Patent Owner in related proceedings. *Id.* at 7–12. Petitioner, however, ignores the most important source of information relevant to claim construction: the language of the claims themselves. “In claim construction, this court gives primacy to the language of the claims, followed by the specification. . . . This remains true in construing patent claims before the PTO.” *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014) (citing *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997)). Thus, in determining the broadest reasonable interpretation of “hair coloring agent,” we must consider the context in which that term appears. *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016).

As noted above, the claims of the '419 patent recite “mixing a formulation comprising an active agent with a bleaching formulation . . . wherein the mixture does not contain a hair coloring agent.” Ex. 1001, 25:42–26:5. Thus, the mixture recited in the claims must include “a bleaching formulation” and must not contain “a hair coloring agent.” *Id.* Under Petitioner’s proposed construction, hair coloring agents would include bleaching agents. Pet. 7–8. Accordingly, under Petitioner’s proposed construction, the claims of the '419 patent simultaneously would require the presence of “a bleaching formulation” and the absence of a bleaching agent. *Id.* at 30–32. Petitioner’s proposed construction would lead to an absurd result, which strongly suggests that Petitioner’s proposed construction is unreasonable.

Moreover, “[a]pplicants can define . . . claim scope during prosecution,” just as they can in a patent specification. *Teva Pharms. USA*,

Inc. v. Sandoz, Inc., 789 F.3d 1335, 1343 (Fed. Cir. 2015). Here, during prosecution of the '419 patent, the applicant stated that “[t]he term ‘hair coloring agent’ refers to a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection.” Ex. 1005, 7. To define specific terms used to describe an invention, the applicant need only set out the definition “with reasonable clarity, deliberateness, and precision,” “so as to give one of ordinary skill in the art notice of the change” in meaning. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). On the present record, the definition of the term “hair coloring agent” set out in the prosecution history of the '419 patent is sufficiently clear, deliberate, and precise to give a person of ordinary skill in the art notice that the term is used in the '419 patent in a manner that does not include substances other than “colorant[s] or pigment[s] that [are] customarily used in hair care products,” even if those other substances might be described as “hair coloring agents” outside the context of the '419 patent. Ex. 1005, 7. Accordingly, we should give effect to that definition. Because Patent Owner’s proposed construction of “wherein the mixture does not contain a hair coloring agent” gives effect to the prosecution history’s definition of “hair coloring agent,” we adopt Patent Owner’s proposed construction for purposes of the present decision.

Thus, on the present record, and for purposes of the present decision, we construe “wherein the mixture does not contain a hair coloring agent” as “wherein the mixture applied to the hair does not have a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection.”

B. Post-Grant Review Eligibility

Post-grant reviews are available only for patents “described in section 3(n)(1)” of the Leahy-Smith America Invents Act (“AIA”), Pub L. No. 112-29, 125 Stat. 284 (2011). AIA § 6(f)(2)(A). These patents are those that issue from applications “that contain[] or contained at any time . . . a claim to a claimed invention that has an effective filing date as defined in section 100(i) of title 35, United States Code, that is on or after” “the expiration of the 18-month period beginning on the date of the enactment of” the AIA. *Id.* § 3(n)(1). Because the AIA was enacted on September 16, 2011, post-grant reviews are available only for patents that issue from applications that at one point contained at least one claim with an effective filing date on or after March 16, 2013, with “effective filing date” having the definition given to it by 35 U.S.C. § 100(i): “the filing date of the earliest application for which the . . . application is entitled, as to such invention, to a right of priority under section 119, 365(a), 365(b), 386(a), or 386(b) or to the benefit of an earlier filing date under section 120, 121, 365(c), or 386(c).” 35 U.S.C. § 100(i)(1)(B). Entitlement to the benefit of an earlier date under §§ 119, 120, 121, and 365 is premised on disclosure of the claimed invention in the manner provided by § 112(a) (other than the requirement to disclose the best mode) in the application for which the benefit of the earlier filing date is sought. *See* 35 U.S.C. §§ 119(e), 120. In the event that the application is not entitled to any earlier filing date or right of priority, the effective filing date is “the actual filing date of the . . . application for the patent containing a claim to the invention.” *Id.* § 100(i)(1)(A).

Petitioner asserts that the ’419 patent issued from an application filed on March 31, 2016, and that application claimed priority to a provisional

application filed on May 16, 2014. Pet. 3. Both of these statements are supported by the present record. Ex. 1001, at [22], [60]. Even if the claims of the '419 patent are entitled to the filing date of the provisional application, a question we need not answer at this time, the earliest possible effective filing date of the '419 patent is May 16, 2014, which is after March 16, 2013. Accordingly, the '419 patent is eligible for post-grant review.

Additionally, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent.” 35 U.S.C. § 321(c). Here, the '419 patent issued on November 22, 2016. Ex. 1001, at [45]. The Petition was filed on January 31, 2016. Pet. 51, 52. Because this is within 9 months of the issuance of the '419 patent, the Petition is timely.

C. Asserted Indefiniteness

Petitioner asserts that claims 1–10 of the '419 patent are indefinite under 35 U.S.C. § 112(b). Pet. 29–35.

1. Claims 1–10

Petitioner argues that all of claims 1–10 simultaneously require “a bleaching formulation” and exclude “‘a hair coloring agent,’ which under a proper interpretation includes bleaching agents.” *Id.* at 30–32. Patent Owner argues that this argument fails under the proper construction of “a hair coloring agent.” Prelim. Resp. 36–37.

Both parties base their arguments on their proposed construction of “wherein the mixture does not contain a hair coloring agent.” Pet. 30–32; Prelim. Resp. 36–37. If “a hair coloring agent” encompasses bleaching agents, then the claims all require a bleaching formulation and simultaneously exclude a bleaching agent, which would make it impossible

to determine the scope of the claims. As discussed above, however, we interpret “wherein the mixture does not contain a hair coloring agent” as “wherein the mixture applied to the hair does not have a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection.” We have not been directed to evidence of record that a person of ordinary skill in the art would have considered a bleaching agent to be “a colorant or pigment.” Pet. 7 (describing bleaching as a “process[] that destroy[s] pigment to change hair color,” as opposed to a “process[] that deposit[s] dyes, pigments, or other substances onto the hair to change hair color”); Ex. 1006 ¶¶ 14–15 (contrasting “dyeing,” meaning “processes that alter or change hair color by depositing dyes, pigments, or other substances onto the hair,” with “bleaching,” meaning “the application of an oxidizing agent to hair to destroy the natural or artificial pigment”). Accordingly, on the present record, we are not persuaded that Petitioner has shown that it is more likely than not that claims 1–10 of the ’419 patent are indefinite.

2. Claims 4 and 5

Claims 4 and 5 each recite “[t]he method of claim 1, wherein the *active agent* is present in an amount ranging from about [a minimum weight percentage] to [a maximum weight percentage] of *the formulation*.” Ex. 1001, 26:21–26 (emphases added). Claim 1 recites two formulations: “a formulation comprising an active agent” and “a bleaching formulation.” *Id.* at 25:43–44. Petitioner argues that the recitation of “the formulation” in claims 4 and 5 to refer to an unspecified one of the two “formulation[s]” recited in claim 1 renders claims 4 and 5 indefinite. Pet. 32–35. Patent

Owner argues that this argument fails because “[t]he scope of these claims is readily ascertainable by those skilled in the art.” *Id.* at 37–38.

We are not persuaded that Petitioner has shown it is more likely than not that claims 4 and 5 of the ’419 patent are indefinite. Claims 4 and 5 refer to “the active agent [being] present” in “the formulation” of claim 1, and claim 1 recites “a formulation comprising an active agent.” Ex. 1001, 25:43–44, 26:21–26. Accordingly, a person of ordinary skill in the art would understand “the formulation” in claims 4 and 5, given the specific reference in those claims to the amount of active agent in the formulation, as referring to the “formulation comprising an active agent” in claim 1. Although Petitioner argues that the ordinary artisan may have some difficulty in determining the scope of claims 4 and 5, Petitioner does not explain why a person of ordinary skill in the art could not reasonably determine the scope of those claims given their express language. Pet. 32–35.

We also are not persuaded that Patent Owner’s infringement allegations would have changed the degree of difficulty a person of ordinary skill in the art would have had in determining the scope of claims 4 and 5. *See* Pet. 34 (citing Ex. 1007 ¶¶ 97–98). Patent Owner’s infringement allegations recite both (i) a range of bleach to developer mixing ratios, and (ii) a range of maleic acid concentrations. Ex. 1007 ¶¶ 97–98. Given these ranges, Petitioner does not explain why Patent Owner’s statement places the asserted maleic acid concentration in the “formulation comprising an active agent” outside the concentration ranges recited in claims 4 and 5. Pet. 34. Accordingly, we are not persuaded that Petitioner has shown it is more likely than not that claims 4 and 5 of the ’419 patent are indefinite.

D. Asserted Lack of Written Description

Petitioner asserts that claims 1–10 of the '419 patent are unpatentable under 35 U.S.C. § 112(a) as lacking written description support in the specification. Pet. 35–40.

1. Claims 1–10

Petitioner argues that all of claims 1–10 simultaneously require “a bleaching formulation” and exclude “a hair coloring agent,” which includes bleaching agents. *Id.* at 36–39. Petitioner argues further that “the specification of the '419 patent does not reasonably convey to those skilled in the art . . . that the inventors had possession of the claimed bleaching method with a bleaching formulation that **does not contain** a bleaching agent.” *Id.* (emphasis in original). Patent Owner argues that this argument fails under the proper construction of “a hair coloring agent.” Prelim. Resp. 39–40.

Both parties base their arguments on their proposed construction of “wherein the mixture does not contain a hair coloring agent.” Pet. 36–39; Prelim. Resp. 39–40. If “a hair coloring agent” encompasses bleaching agents, then the claims all require a bleaching formulation and simultaneously exclude a bleaching agent, a scope that Petitioner argues is not described in the specification of the '419 patent. As discussed above, however, we interpret “wherein the mixture does not contain a hair coloring agent” as “wherein the mixture applied to the hair does not have a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection.” We have not been directed to evidence of record that a person of ordinary skill in the art would have considered a bleaching agent to be “a colorant or

pigment.” Pet. 7 (describing bleaching as a “process[] that destroy[s] pigment to change hair color,” as opposed to a “process[] that deposit[s] dyes, pigments, or other substances onto the hair to change hair color”); Ex. 1006 ¶¶ 14–15 (contrasting “dyeing,” meaning “processes that alter or change hair color by depositing dyes, pigments, or other substances onto the hair,” with “bleaching,” meaning “the application of an oxidizing agent to hair to destroy the natural or artificial pigment”). Accordingly, on the present record, we are not persuaded that Petitioner has shown it is more likely than not that claims 1–10 of the ’419 patent lack written description support.

2. *Claim 7*

Claim 7 recites “[t]he method of claim 1, wherein step (b) is repeated one or more times.” Ex. 1001, 26:30–31. Claim 1 recites that “step (b)” is “applying the mixture [of the formulation comprising an active agent and a bleaching formulation] to the hair.” *Id.* at 25:54. Petitioner argues that this claim lacks written description support in the specification of the ’419 patent, because the specification describes applying the active agent formulation more than once but fails to describe applying the mixture of the active agent formulation and the bleaching formulation more than once. Pet. 39. Patent Owner argues that the specification describes applying a mixture more than once. Prelim. Resp. 40.

We are not persuaded that Petitioner has shown sufficiently that the specification fails to describe the claimed repetition of applying the mixture of formulations to hair. First, the specification states that “application of the active agent may be repeated one or more times.” Ex. 1001, 17:48–49. This is not limited to applying the active agent as a formulation unmixed with a

bleaching formulation, because it describes repeatedly applying the active agent itself rather than any particular composition comprising the active agent. The specification separately describes the forms in which the active agent may be applied: “The active agent formulation may be applied simultaneously with the hair coloring formulation For example, the active agent formulation may be mixed with the hair coloring treatment and the mixture . . . may be applied to the hair.” *Id.* at 17:32–38. Although this does not describe repeating the application of the mixture, it also does not contain any language limiting it to a single application. As for the description of mixing the active agent formulation with a “hair coloring treatment” rather than with the claimed “bleaching formulation,” the specification also describes “hair color treatments” as including “a bleaching formulation.” *Id.* at 16:47–49. The combination of these statements describes repeatedly applying an active agent as part of a mixture of an active agent formulation and a hair coloring treatment that includes a bleaching formulation. Thus, on the present record, we are not persuaded that Petitioner has shown it is more likely than not that the specification as a whole, including these statements, fails to “reasonably convey[] to those skilled in the art that the inventor had possession of the” subject matter of claim 7, which recites repeatedly applying a mixture of an active agent formulation and a bleaching formulation. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

E. Asserted Lack of Enablement

Petitioner asserts that claims 1–10 of the ’419 patent are unpatentable under 35 U.S.C. § 112(a) because the specification lacks an enabling disclosure. Pet. 40–48. Petitioner bases its argument on its claim

construction, under which all of claims 1–10 simultaneously require “a bleaching formulation” and exclude “a hair coloring agent,” which includes bleaching agents. *Id.* Petitioner argues further that “the ’419 patent would not have enabled a skilled artisan, in 2014, to practice the method of bleaching the hair with a bleaching formulation that does not contain a bleaching agent.” *Id.* at 43. Patent Owner argues that this argument fails under the proper construction of “a hair coloring agent.” Prelim. Resp. 41.

Both parties base their arguments on their proposed construction of “wherein the mixture does not contain a hair coloring agent.” Pet. 40–48; Prelim. Resp. 41. If “a hair coloring agent” encompasses bleaching agents, then the claims all require a bleaching formulation and simultaneously exclude a bleaching agent, which Petitioner argues is not enabled by the specification of the ’419 patent. As discussed above, however, we interpret “wherein the mixture does not contain a hair coloring agent” as “wherein the mixture applied to the hair does not have a colorant or pigment that is customarily used in hair care products, which changes the color or tone of the hair it is applied to based on visual inspection.” We have not been directed to evidence of record that a person of ordinary skill in the art would have considered a bleaching agent to be “a colorant or pigment.” Pet. 7 (describing bleaching as a “process[] that destroy[s] pigment to change hair color,” as opposed to a “process[] that deposit[s] dyes, pigments, or other substances onto the hair to change hair color”); Ex. 1006 ¶¶ 14–15 (contrasting “dyeing,” meaning “processes that alter or change hair color by depositing dyes, pigments, or other substances onto the hair,” with “bleaching,” meaning “the application of an oxidizing agent to hair to destroy the natural or artificial pigment”). Accordingly, on the present

record, we are not persuaded that Petitioner has shown it is more likely than not that claims 1–10 of the '419 patent lack an enabling disclosure.

CONCLUSION

Because Petitioner has not shown that any claim of the '419 patent is more likely than not to be unpatentable, and because 35 U.S.C. § 324(a) requires such a showing before we may institute a post-grant review, we do not institute a post-grant review of any claim of the '419 patent.

ORDER

It is hereby

ORDERED that the Petition is denied, and no trial is instituted.

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