



continuation of parent application no. 14/713,885, which was filed on May 15, 2015, published on November 19, 2015, and issued as U.S. Patent No. 9,326,926 on May 3, 2016. The ‘419 patent lists as inventors Eric D. Pressly and Craig J. Hawker (“the inventors”), and identifies Liqwd, Inc. as the assignee. The ‘419 patent describes “[f]ormulations, kits, and methods for rebuilding the disulfide bonds in keratin” to be applied in conjunction with a hair coloring treatment. (‘419 patent, Abstract)

United States Patent No. 9,668,954 (“the ‘954 patent”) (together with the ‘419 patent, the “patents-in-suit”) was filed on January 25, 2017 and issued on June 6, 2017. On April 26, 2017, the USPTO issued a notice of allowance for the claims in the ‘954 patent. (D.I. 143, Ex. B) The ‘954 patent is a continuation of United States Patent Application No. 15/290,593, which is a continuation of the ‘419 patent. The ‘954 patent has the same title, inventors, and specification as the ‘419 patent. The active agent element of claim 1 of the ‘954 patent requires application of a bleaching mixture containing an active agent of maleic acid to the hair. (‘954 patent, col. 25:58-67)

### **III. LEGAL STANDARD**

Construing the claims of a patent presents a question of law, although subsidiary fact finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 388-90 (1996)). “It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). “[T]here is no magic formula or catechism for conducting claim construction.” *Id.* at 1324. Instead, the

court may attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.*

The words of the claims “are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312-13 (internal citations and quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted); *see also Eon Corp. IP Holdings v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016). Claim terms are typically used consistently throughout the patent, and “usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Phillips*, 415 F.3d at 1314 (observing that “[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . .”).

It is likewise true that “[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15 (internal citation omitted). This “presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003) (citing *Ecolab Inc. v. Paraclypse, Inc.*, 285 F.3d 1362, 1375 (Fed. Cir. 2002)).

Other intrinsic evidence, including the patent specification, “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the

meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). It bears emphasis that “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted), *aff’d*, 481 F.3d 1371 (Fed. Cir. 2007). The specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

In addition to the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 980. The prosecution history, which is also “intrinsic evidence,” “consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

A court also may rely on “extrinsic evidence,” which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the

court in determining the meaning of a term to those of skill in the relevant art because such dictionaries “endeavor to collect the accepted meanings of terms used in various fields of science and technology.” *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* (“[C]onclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”). Overall, while extrinsic evidence may be useful to the court, it is less reliable than intrinsic evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1318-19.

Finally, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Renishaw PLC v. Marposs Societa’ Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007).

**IV. CONSTRUCTION OF DISPUTED TERMS**

**A. “active agent in the mixture is at a concentration” (‘419 patent, claim 1 and asserted dependent claims; ‘954 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation	<p>The phrase identified by Olaplex should be construed in context of the entire “wherein” clause as identified below in Defendants’ proposed construction. Thus, the phrase identified by Olaplex in the context of the wherein clause (“wherein the active agent in the mixture is at a concentration ranging from about 0.1% by weight to about 50% by weight”) should be construed as:</p> <p>wherein the active agent is present in the mixture that is applied to the hair at a concentration ranging from about 0.1% by weight to about 50% by weight</p>	weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation

I recommend that the court adopt Olaplex’s proposed construction, which is consistent with the intrinsic and extrinsic record. The parties do not dispute the meaning of the term “active agent,” which is defined in the specification as the formula for maleic acid or salts thereof. (‘419 patent, col. 9:6-20, 25:44-53; ‘954 patent, col. 25:63) Moreover, the parties do not challenge the meaning of “mixture” or “concentration” as they are used in the disputed phrase. Instead, the parties’ dispute focuses on whether the concentration of the active agent is measured before or after being added to the final bleaching solution. Specifically, Olaplex contends that the active

agent concentration must be relative to the total weight of the mixture of active agent formulation and bleaching formulation before it is added to the solution. (D.I. 423 at 6) In contrast, L'Oréal alleges that the active agent must be in the mixture when the concentration is calculated. (D.I. 420 at 8)

Claim 1 of the '419 patent recites "a formulation comprising an active agent" mixed with a bleaching formulation, the resulting mixture having an "active agent . . . at a concentration ranging from about 0.1% by weight to about 50% by weight." ('419 patent, col. 25:43-26:3) In the context of the specification, this claim language supports Olaplex's proposed construction. (*Id.*, col. 22:20-23:2) In Example 3, the specification explains that "[t]he active agent formulation . . . contained maleic acid at concentrations of 2.0 g in 10 g total solution (water)." (*Id.*, col. 22:28-30) Example 3 further states that one ounce of developer was mixed with one ounce of powder bleach to form a bleaching formulation weighing about 56 g, which was subsequently mixed with nine milliliters of the active agent formulation weighing about 9 grams to form a total mixture weighing 65 grams, with an overall active agent concentration of approximately 3 wt %. (*Id.*, col. 22:35-42; 11/8/18 Tr. at 34:14-37:10) This falls within the range of claim 1 of the '419 patent. Under L'Oréal's proposed construction, this embodiment would be excluded from the scope of the claims.

Moreover, the PTAB decision denying institution of post-grant review ("PGR") proceedings on the '954 patent supports Olaplex's position because the PTAB expressly rejected the construction proposed by L'Oréal, finding L'Oréal's proposal to be a "highly unusual construction requiring examination of ionic species present in the dynamic and ever-changing final bleaching mixture" without offering any examples of where such an analysis was made. (D.I. 426, Ex. 20 at 12-13) The PTAB noted that Olaplex's proposed construction was

“consistent with the ‘954 patent and with the manner of calculating active agent concentrations that even [L’Oréal’s] experts apparently advanced in related post-grant proceedings.” (*Id.* at 13)

Olaplex’s expert witness, Dr. Edward T. Borish, also instructs that a person of ordinary skill in the art would evaluate the concentration of the active agent in the active agent formulation relative to the total weight of the final mixture. (D.I. 288 at ¶¶ 66-67) (opining that “a POSITA would have understood the language of claim 1 of the ‘419 patent as describing the concentration range in terms of (1) the weight of active agent added into the active agent formulation relative to (2) the total weight of the final mixture.”). For these reasons, I recommend that the court adopt Olaplex’s proposed construction.

**B. “bleaching formulation” (‘419 patent, claim 1 and asserted dependent claims; ‘954 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
an oxidizing formulation with a sufficiently alkaline pH to lighten hair	No separate claim construction required, but if construction is required, the plain meaning should control	an oxidizing formulation with a sufficiently alkaline pH to lighten hair

I recommend that the court adopt Olaplex’s proposal, which is supported by the evidence of record and is consistent with the PTAB’s decision denying institution of PGR proceedings on the ‘954 patent. The parties’ dispute centers on whether the term “bleaching formulation,” as used in the ‘419 and ‘954 patents, requires an alkaline pH. Although the patents do not include an express requirement for “a sufficiently alkaline pH,” it is likewise true that the intrinsic record contains no evidence affirmatively suggesting that acidic bleaching formulations are effective in bleaching hair. (D.I. 426, Ex. 20 at 15-16)

The PTAB’s decision denying institution of PGR proceedings on the ‘954 patent supports Olaplex’s position. (11/8/18 Tr. at 142:10-22) As indicated by the PTAB in adopting Olaplex’s



proposed construction, the only example of an acidic bleaching formulation effective at lightening hair is the DeGeorge reference, which uses an acidic lightening composition with a pH range of 2 to 7 only after the hair has been treated with an alkali. (D.I. 421, Ex. D at col. 4:1-35; D.I. 426, Ex. 20 at 15-16) Consequently, the DeGeorge reference does not support a finding that an acidic lightening composition would effectively lighten hair in the absence of hair containing residual alkali from prior treatments.

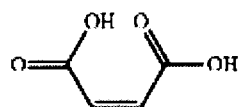
Extrinsic evidence from Olaplex’s expert witness further supports Olaplex’s proposed construction. L’Oréal relies on Dr. Borish’s declaration in support of Olaplex’s original motion for a preliminary injunction, in which he indicated that “[t]he ‘419 patent uses the word ‘bleaching’ in its plain and ordinary way: ‘lightening,’” and opined that “[t]he phrase ‘bleaching formulation’ in claim 1 refers to a chemical mixture that lightens hair color.” (D.I. 422, Ex. AC at ¶¶ 35-36) However, Dr. Borish’s testimony in the PGR proceedings supports Olaplex’s position that a person of ordinary skill would understand that a sufficiently alkaline pH is required for the bleach formulation to work properly. Specifically, Dr. Borish testified that “an important aspect of bleaching formulations is the inclusion of alkali” because “[t]o bleach hair generally requires a pH of 9 to 11, usually practiced 10 to 11.” (D.I. 426, Ex. 20 at 14 n.13)

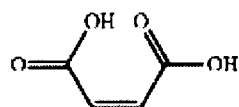
**C. “bleach powder” (‘954 patent, claim 1 and asserted dependent claims)**

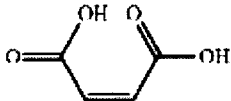
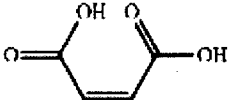
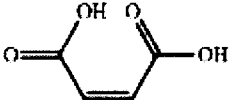
<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
“a dry particulate composition (i.e., a powder) comprising at least a persulfate and an alkalizing agent”	No separate claim construction required, but if construction is required, the plain meaning should control.	“a dry particulate composition (i.e., a powder) comprising at least a persulfate and an alkalizing agent”

I recommend that the court adopt Olaplex’s proposed construction, which is supported by the weight of the evidence. The parties’ dispute focuses on whether the term “bleach powder,”

as used in the ‘419 and ‘954 patents, must contain an alkalizing agent.<sup>1</sup> The ‘954 patent does not expressly include such a requirement in the claim language. However, Examples 3 to 5 in the ‘954 patent specification describe bleach powder products that are alkaline compositions containing persulfate salts, including Joico Verolight powder bleach and Clairol Professional, Basic White. (‘954 patent, col. 22:40-24:18; D.I. 426, Ex. 20 at 14-15 & n.14) In addition, during the PGR proceedings on the ‘954 patent, the PTAB defined the term in a manner consistent with Olaplex’s proposed construction, concluding that the “bleach powder” of claim 1 “requires a dry particulate composition (i.e., powder) comprising at least a persulfate and an alkalizing agent.” (D.I. 426, Ex. 20 at 16; Ex. 21 at 8-10; D.I. 460, Ex. 2 at 2-8)



**D. “wherein the active agent has the formula:  ” (‘419 patent, claim 1 and asserted dependent claims)**

Olaplex	L’Oréal	Court
No construction needed. The plain and ordinary meaning applies, i.e., the formula of the active agent is: 	wherein the active agent is free acid having the nonionic structure: 	wherein the active agent is free acid having the nonionic structure: 

I recommend that the court adopt L’Oréal’s proposal. The parties do not dispute that the claimed chemical compound is the nonionic structure of maleic acid. (‘419 patent, col. 25:44-51) The specification also identifies the nonionic form of maleic acid. (*Id.*, col. 9:6-12; ‘954 patent, col. 9:6-14) The specification expressly distinguishes these nonionic chemical structures

<sup>1</sup> The parties do not dispute the definition of a powder as “a dry particulate composition.” (11/8/18 Tr. at 155:5-10)

from “a simple salt of these structures” representing the ionic species of maleic acid. (‘419 patent, col. 9:6-20; 11:3-18; ‘954 patent, col. 4:27-28 (distinguishing the “free acid” form from salts in defining carboxylic acid<sup>2</sup>)). The deposition testimony of Dr. Borish establishes that maleic acid must transform into an ionic species such as hydrogen maleate or maleate through the removal of hydrogen atoms, resulting in a different chemical structure with different properties. (D.I. 421, Ex. L at 46:22-49:21; 59:13-25; D.I. 424 at ¶ 24)

L’Oréal’s proposed construction finds further support in the prosecution histories of various foreign applications, in which Olaplex consistently argued that maleic acid is a nonionic compound that is distinguishable from ionic compounds such as hydrogen maleate and maleate. (D.I. 421, Ex. U at 2 (“There is nothing in WO ‘768 that would have taught or motivated a skilled person to modify the binding agents to be non-ionic compounds, such as maleic acid....”); Ex. V at 2 (same); Ex. X at 2 (same); Ex. Y at 2 (distinguishing claims specifying nonionic compounds and their simple salts from an active agent with two ionic maleate groups); Ex. Z at 7 (concluding that the maleic acid chemical compound, by itself, excluded simple salts)). These representations made by Olaplex in foreign proceedings are relevant to the issue before the court and therefore weigh in favor of L’Oréal’s proposal. *See Starhome GmbH v. AT&T Mobility LLC*, 743 F.3d 849, 858 (Fed. Cir. 2014) (considering the prosecution history of a related European application with caution against “indiscriminate reliance on foreign file histories.”). For these reasons, I recommend that the court adopt L’Oréal’s proposed construction.

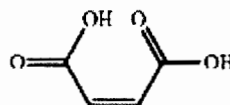
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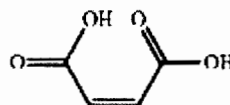
<sup>2</sup> The PTAB recognized that maleic acid is a type of carboxylic acid. (D.I. 426, Ex. 20 at 11)

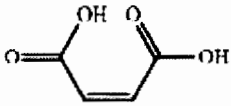
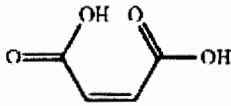
**E. “or salts thereof” (‘419 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., salts of the active agent	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., salts of the active agent

I recommend that the court adopt Olaplex’s proposal and determine that no construction is needed. (D.I. 460, Ex. 1 at 167:19-25, 168:8-23, 169:17-20) The parties dispute whether Olaplex disclaimed the “salts thereof” portion of the claim language by representing that Olaplex’s own product, which has a salt of maleic acid as its active agent, is not covered by the patents-in-suit. However, this dispute has no bearing on the meaning of the term as it appears in the claims.

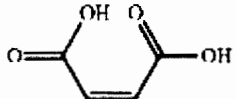
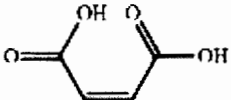
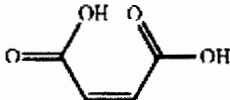


**F. “wherein the active agent has the formula:  or salts thereof” (‘419 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., the active agent has the formula of maleic acid:  or salts of the active agent	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., the active agent has the formula of maleic acid:  or salts of the active agent

For the reasons previously discussed at §§ IV.D and E, *supra*, this claim term is not indefinite. Therefore, I recommend that the court adopt Olaplex’s proposal and conclude that no construction is necessary.

**G. “wherein the active agent is maleic acid” (‘954 patent, claim 1 and asserted dependent claims)**

Olaplex	L’Oréal	Court
<p>No construction needed. The plain and ordinary meaning applies, i.e., the active agent has the formula of maleic acid:</p> 	<p>wherein the active agent is free acid having the nonionic structure:</p> 	<p>wherein the active agent is free acid having the nonionic structure:</p> 

For the reasons previously discussed at § IV.D, *supra*, I recommend that the court adopt L’Oréal’s proposal and conclude that no construction is necessary.

**H. “wherein the active agent in the mixture is at a concentration ranging from about 0.1% by weight to about 50% by weight” (‘419 patent, claim 1 and asserted dependent claims; ‘954 patent, claim 1 and asserted dependent claims)**

Olaplex	L’Oréal	Court
<p>The only portion of this claim phrase that should be construed is: “wherein the active agent in the mixture is at a concentration.”</p> <p>Olaplex’s proposed construction of this portion: “weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>	<p>wherein the active agent is present in the mixture that is applied to the hair at a concentration ranging from about 0.1% by weight to about 50% by weight</p>	<p>The only portion of this claim phrase that should be construed is: “wherein the active agent in the mixture is at a concentration.”</p> <p>Olaplex’s proposed construction of this portion: “weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>

For the reasons previously discussed at § IV.A, *supra*, I recommend that the court adopt Olaplex’s proposed construction. The parties do not dispute the meaning of the words of the claim term beyond the phrase previously discussed at § IV.A, *supra*.

**I. “about” (‘419 patent, claim 1 and asserted dependent claims; ‘954 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., approximately	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., approximately

I recommend that the court adopt Olaplex’s proposal and apply the plain and ordinary meaning of the term. The parties’ dispute focuses on the proper value of the concentration range represented by the term “about.” Although the specification and prosecution history do not define or limit the scope of the term, a person of ordinary skill in the art would understand that the concentration range of the active agent from about 0.1% by weight to about 50% by weight is approximate. *See Modine Mfg. Co. v. U.S. Int’l Trade Comm’n*, 75 F.3d 1545, 1554 (Fed. Cir. 1996) (“Although it is rarely feasible to attach a precise limit to ‘about,’ the usage can usually be understood in light of the technology embodied in the invention.”), *abrogated on other grounds by Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558 (Fed. Cir. 2000). “Generally, the use of ‘about’ is intended to avoid a ‘strict numerical boundary to the specified parameter.’” *Amazin’ Raisins Int’l, Inc. v. Ocean Spray Cranberries, Inc.*, 2007 WL 2386360, at \*12 (D. Mass. Aug. 20, 2007) (quoting *Pall Corp. v. Micron Separations*, 66 F.3d 1211, 1217 (Fed. Cir. 1995)). “However, unless the patentee serves as his own lexicographer and defines the term differently, it should be given its ordinary and accustomed meaning of ‘approximately.’” *Id.* (citing *Conopco, Inc. v. May Dep’t Stores Co.*, 46 F.3d 1556, 1561 n.2 (Fed. Cir. 1994)).

Moreover, L'Oréal's expert in the PGR proceedings confirmed that "about" is not indefinite and is reasonably understood by a person of ordinary skill in the art. (D.I. 426, Ex. 20 at 12 n.12, 36-37) ("[A] skilled artisan in 2014 and 2017 would have interpreted the term 'about' to refer to an amount that can range  $\pm 10\%$ ").

**J. "mixing a formulation comprising an active agent with a bleaching formulation" ('419 patent, claim 1 and asserted dependent claims)**

<b>Olaplex</b>	<b>L'Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., mixing a formulation comprising an active agent with a bleaching formulation	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., mixing a formulation comprising an active agent with a bleaching formulation

I recommend that the court adopt Olaplex's proposal and apply the plain and ordinary meaning of the term. The specification describes in detail two ways the active agent formulation may be mixed with the bleaching formulation:

The active agent formulation may be applied simultaneously with the the hair coloring formulation or subsequently to the application of the hair coloring formulation. For example, the active agent formulation may be mixed with the hair coloring treatment and the mixture, containing both the active agent and the hair coloring treatment, may be applied to the hair. Alternatively, subsequent to coloring the hair, the active agent formulation, or a formulation thereof is applied to the hair.

('419 patent, col. 17:32-41) Indefiniteness arguments stemming from the "time of use" phraseology in dependent claim 10 are further addressed at § IV.K, *infra*.

**K. “wherein the mixing occurs at the time of use and prior to application of the mixture to the hair” (‘419 patent, claim 10)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair

I recommend that the court adopt Olaplex’s proposal and apply the plain and ordinary meaning of the disputed term. The plain language of dependent claim 10 establishes that “the mixing occurs at the time of use and prior to application of the mixture to the hair.” (‘419 patent, col. 26:51-53) The record reflects that a person of ordinary skill in the art would understand the formulations must be mixed shortly before application to the hair due to the rapid chemical decay of the ingredients in the mixed formulations. (D.I. 422, Ex. AG at 238)<sup>3</sup> (“Oxidizing emulsions containing hydrogen peroxide are mixed just before use with an alkaline agent . . . because after 20 min the partially decomposed hydrogen peroxide has virtually no further effect.”). This extrinsic evidence is sufficient to establish the meaning of “at the time of use” with reasonable certainty from the perspective of a person of ordinary skill in the art. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014) (“The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable.”).

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<sup>3</sup> *See also* D.I. 460, Ex. 1 at 144:23-145:9; 146:2-12.

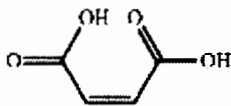
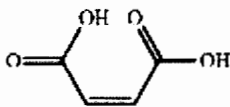
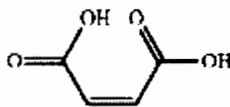


**L. “wherein step (b) occurs at the time of use and prior to application of the mixture to the hair” (‘954 patent, claim 11)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair	Indefinite	No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair

For the reasons previously discussed at § IV.K, *supra*, I recommend that the court adopt Olaplex’s proposal and conclude that the plain and ordinary meaning applies.

**M. “applying a second active agent formulation comprising maleic acid” (‘954 patent, claim 12)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
No construction needed. The plain and ordinary meaning applies, i.e., the active agent is a composition with the formula of maleic acid: 	Applying a second active agent formulation comprising free acid having the nonionic structure: 	Applying a second active agent formulation comprising free acid having the nonionic structure: 

For the reasons previously discussed at § IV.D, *supra*, I recommend that the court adopt L’Oréal’s proposal and conclude that no construction is necessary.

**N. “wherein following step (d) breakage of the hair is decreased by at least [5%], [10%], [20%] compared to hair bleached with the bleaching formulation in the absence of the active agent” (‘954 patent, claims 14, 15, 16)**

<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Olaplex’s proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>	<p>Indefinite</p>	<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>

I recommend that the court adopt Olaplex’s proposed construction, which is supported by the intrinsic and extrinsic evidence. The parties’ dispute focuses on whether the challenged claim term is indefinite, or whether a person of ordinary skill in the art would understand how to assess hair breakage from the claims in light of the specification.

The specification of the ‘954 patent provides sufficient guidance regarding evaluating hair breakage to overcome L’Oréal’s indefiniteness challenge. Example 4 in the specification of the ‘954 patent discloses the comparison between treated and untreated hair samples from the same individual. (‘954 patent, col. 23:18-51) The specification explains that the two hair samples are cut into ½ inch wide wefts, coated with a bleaching mixture, and washed with shampoo and air dried after the bleaching period. (*Id.*) The subsequent comparison of the swatches revealed no discernable breakage on the swatch treated with the bleaching mixture, as

compared to breakage and fraying on the control swatch treated with bleaching formulation alone. (*Id.*)

The record reflects that there is an industry standard for measuring decreases in hair breakage which is consistent with the method described in the specification. (D.I. 426, Ex. 20 at 35 n.25; Ex. 28 at 445) Specifically, the method requires treating tresses with a conditioning treatment to reduce breakage, and comparing them to unconditioned tresses after multiple rounds of grooming and the counting of broken fibers. (*Id.*, Ex. 28 at 445) This evidence supports Olaplex’s position that a person of ordinary skill in the art would know what test to use based on the industry standard. *See Wellman v. Eastman*, 642 F.3d 1355, 1367 (Fed. Cir. 2011) (“Well known industry standards need not be repeated in a patent.”).

Intrinsic evidence from the PTAB proceedings further supports Olaplex’s position. L’Oréal raised its indefiniteness argument regarding this term before the PTAB in the PGR proceedings, and the PTAB concluded that the term was not indefinite. (D.I. 426, Ex. 20 at 30-36) For these reasons, I recommend that the court adopt Olaplex’s proposed construction.

**O. “wherein following step (c) breakage of the hair is decreased by at least [5%], [10%], [20%] compared to hair bleached with the bleaching formulation in the absence of the active agent” (“954 patent, claims 24, 25, 26)**

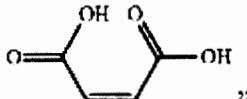
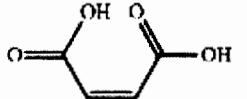
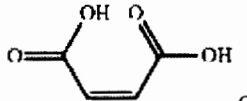
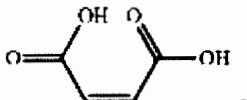
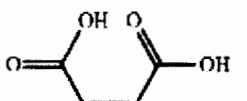
<b>Olaplex</b>	<b>L’Oréal</b>	<b>Court</b>
<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Olaplex’s proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p>	<p>Indefinite</p>	<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p>

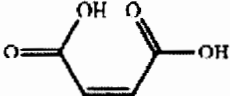
The other claim language needs no construction. Plain and ordinary meaning.		The other claim language needs no construction. Plain and ordinary meaning.
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For the reasons previously discussed at § IV.N, *supra*, I recommend that the court adopt Olaplex’s proposal.

## V. CONCLUSION

For the reasons set forth above, I recommend that the court construe disputed terms as follows:

<b>Claim Term</b>	<b>Recommended Construction</b>
“active agent in the mixture is at a concentration”	weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation
“bleaching formulation”	an oxidizing formulation with a sufficiently alkaline pH to lighten hair
“bleach powder”	a dry particulate composition (i.e., a powder) comprising at least a persulfate and an alkalizing agent
“wherein the active agent has the formula:  ”	wherein the active agent is free acid having  the nonionic structure:
“or salts thereof”	No construction needed. The plain and ordinary meaning applies, i.e., salts of the active agent
“wherein the active agent has the formula:  or salts thereof”	No construction needed. The plain and ordinary meaning applies, i.e., the active agent has the formula of maleic acid:  or salts of the active agent
“wherein the active agent is maleic acid”	wherein the active agent is free acid having the nonionic structure: 


<p>“wherein the active agent in the mixture is at a concentration ranging from about 0.1% by weight to about 50% by weight”</p>	<p>The only portion of this claim phrase that should be construed is: “wherein the active agent in the mixture is at a concentration.”</p> <p>Olaplex’s proposed construction of this portion: “weight of active agent added into the active agent formulation relative to the total weight of the mixture with the bleaching formulation.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>
<p>“about”</p>	<p>No construction needed. The plain and ordinary meaning applies, i.e., approximately</p>
<p>“mixing a formulation comprising an active agent with a bleaching formulation”</p>	<p>No construction needed. The plain and ordinary meaning applies, i.e., mixing a formulation comprising an active agent with a bleaching formulation</p>
<p>“wherein the mixing occurs at the time of use and prior to application of the mixture to the hair”</p>	<p>No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair</p>
<p>“wherein step (b) occurs at the time of use and prior to application of the mixture to the hair”</p>	<p>No construction needed. The plain and ordinary meaning applies, i.e., the active agent formulation and bleaching formulation are mixed shortly before the mixture is applied to the hair</p>
<p>“applying a second active agent formulation comprising maleic acid”</p>	<p>Applying a second active agent formulation comprising free acid having the nonionic</p> <div style="text-align: center;">  </div> <p>structure:</p>
<p>“wherein following step (d) breakage of the hair is decreased by at least [5%], [10%], [20%] compared to hair bleached with the bleaching formulation in the absence of the active agent”</p>	<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>

<p>“wherein following step (c) breakage of the hair is decreased by at least [5%], [10%], [20%] compared to hair bleached with the bleaching formulation in the absence of the active agent”</p>	<p>The only portion of this claim phrase that should be construed is: “breakage of the hair.”</p> <p>Proposed construction of this portion: “visible broken fibers of hair upon industry standard testing.”</p> <p>The other claim language needs no construction. Plain and ordinary meaning.</p>
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This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The objections and responses to the objections are limited to ten (10) pages each. The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the District Court. *See Sincavage v. Barnhart*, 171 F. App’x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the court’s Standing Order For Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the court’s website, <http://www.ded.uscourts.gov>.

Dated: January 8, 2019



Sherry R. Fallon  
UNITED STATES MAGISTRATE JUDGE