

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

LIQWD, INC., OLAPLEX LLC,
Plaintiffs-Appellants

v.

**L'ORÉAL USA, INC., L'ORÉAL USA PRODUCTS,
INC., L'ORÉAL USA S/D, INC., REDKEN 5TH
AVENUE NYC, L.L.C., L'ORÉAL S.A.,**
Defendants-Appellees

2017-2295

Appeal from the United States District Court for the
District of Delaware in No. 1:17-cv-00014-SLR, Judge Sue
L. Robinson.

Decided: January 16, 2018

SANFORD IAN WEISBURST, Quinn Emanuel Urquhart &
Sullivan, LLP, New York, NY, argued for plaintiffs-
appellants. Also represented by MATTHEW KEMP
BLACKBURN, MICHELLE ANN CLARK, San Francisco, CA;
JOSEPH M. PAUNOVICH, Los Angeles, CA.

NAVEEN MODI, Paul Hastings LLP, Washington, DC,
argued for defendants-appellees. Also represented by

STEPHEN BLAKE KINNAIRD, JOSEPH PALYS, DANIEL ZEILBERGER.

Before DYK, REYNA, and TARANTO, *Circuit Judges*.

TARANTO, *Circuit Judge*.

U.S. Patent No. 9,498,419 describes and claims a method of bleaching hair by applying to the hair a mixture created by combining (a) a bleaching formulation with (b) a second formulation containing an active agent that reduces or repairs damage to the keratin proteins of the hair—damage that can result from bleaching, perming, or other hair-treating processes. The patent lists various compounds that can serve as the active agent, including maleic acid. The claims of the '419 patent are limited to maleic acid (or its salts) as the active ingredient and further require that “the mixture does not contain a hair coloring agent.” '419 Patent, col. 26, lines 4–5.

This case was filed by Liqwd, Inc., as the assignee, and Olaplex LLC as an exclusive licensee, of the '419 patent. We refer to the two plaintiffs collectively as “Olaplex.” According to Olaplex, in 2014 it introduced into the market “an entirely new hair care product category”—“bond builder product[s].” Appellants' Br. 7. Olaplex's product uses bis-aminopropyl diglycol dimaleate (“dimaleate”) as the active agent. *Id.* Olaplex has a number of patents on hair treatments, and at least two—U.S. Patent No. 9,095,518 (issued Aug. 4, 2015) and U.S. Patent No. 9,713,583 (issued July 25, 2017)—include among certain of their claims references to the chemical structure for dimaleate shown in Olaplex's complaint. J.A. 1938. But it is undisputed here that dimaleate does not come within the '419 patent claims.

L'Oréal USA, Inc., sells products that compete directly with Olaplex in the bond-builder hair-care market. Olaplex brought the present suit against L'Oréal in

January 2017. Olaplex alleged that L'Oréal directly infringed and induced infringement of the '419 patent by its use and by its sale with instructions for use (including literature, in-person training sessions, and training videos) of three L'Oréal products—Matrix Bond Ultim8 Step 1 Amplifier, Redken pH–Bonder #1 Bond Protecting Additive, and L'Oréal Professionnel Smartbond Step 1 Additive. *Liqwd, Inc. v. L'Oréal USA, Inc.*, No. 17-cv-14-SLR, 2017 WL 2881351, at *2 (D. Del. July 6, 2017) (*District Court Opinion*). Olaplex alleged, and L'Oréal does not dispute for purposes of this appeal, that the accused L'Oréal products include maleic acid.

Olaplex moved for a preliminary injunction, and in July 2017, the district court denied the motion. The court's dispositive basis for denying the motion was its construction of the claim requirement that the mixture not contain a “hair coloring agent.” Because the adopted construction excluded L'Oréal's products, the court concluded, Olaplex had failed to show a likelihood of success on the merits of its infringement claims and therefore a preliminary injunction was inappropriate. *Id.* at *7.

Olaplex timely appealed. We have jurisdiction under 28 U.S.C. § 1292(a)(1) and (c)(1). We now conclude that the district court erred in its claim construction, and we therefore vacate the denial of the preliminary injunction and remand for further proceedings.

I

This court reviews the grant or denial of a preliminary injunction for an abuse of discretion. *See Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2008). “An abuse of discretion may be established by showing that the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings.” *Novo Nordisk of N. Am., Inc. v. Genentech, Inc.*, 77 F.3d 1364, 1367 (Fed. Cir. 1996). To obtain a preliminary

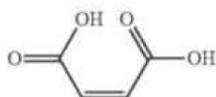
injunction in the district court, the movant must show that (a) it is likely to succeed on the merits, (b) it would suffer irreparable harm in the absence of the preliminary injunction, (c) the balance of equities favors the movant, and (d) the injunction is in the public interest. *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008); see, e.g., *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1375–76 (Fed. Cir. 2009). If that “court’s decision to grant or deny a preliminary injunction hinges on questions of law, this court’s review is de novo.” *Wind Tower Trade Coal. v. United States*, 741 F.3d 89, 95 (Fed. Cir. 2014) (internal quotation marks omitted).

A

The principal dispute concerns the proper construction of the term “hair coloring agent.” Claim 1 of the ’419 patent, the only independent claim, reads as follows:

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.

'419 patent, col. 25, line 42 through col. 26, line 5.

In the district court, Olaplex argued that “hair coloring agent” should be construed to mean “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.” *District Court Opinion*, 2017 WL 2881351, *2. Olaplex based that construction in part on its express statement to that effect in the prosecution history, which Olaplex argued excluded formulations in which the “concentration [of dye, etc.] is so diluted that it does not actually color the hair.” *Id.* at *3.

The district court’s rejection of that construction was its main basis for finding no likelihood of success on the merits. The court reasoned that such a construction was inconsistent with the ’419 patent’s specification because no other “agents” in the patent were defined in terms of their results, as determined by a visual inspection after performance of the method. *Id.* at *3–4. Rather, the court concluded that “hair coloring agent” is properly construed to encompass a composition that is sometimes used at high concentrations to color hair—even if in a particular instance it is present in such low concentrations that it does not color hair. *Id.* at *3. That construction likely excluded the accused L’Oréal products, the court concluded, because they contain dyes that are used in *other* products (in the hair-coloring industry) in high concentrations to color hair, even though they are present in the accused products at such low concentrations that they do not color hair (they are used just to color the product itself). *Id.* at *3, 6.

We review the district court’s claim construction here de novo, as it relies only on intrinsic evidence. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 840–42 (2015). We reject the district court’s construction. The claims readily permit, and the prosecution history clearly requires, a construction of (the claim-forbidden) “hair

coloring agent” as referring to a customary hair-coloring composition that is present in the mixture in an amount that, when the mixture is applied to hair, results in hair coloring, judged in the usual way—by visual inspection.

The claim language, “hair coloring agent,” lends itself to this understanding. In one ordinary meaning, for a substance to be an “agent,” that substance—what it is, how much of it is present—must cause a specific result, not merely be capable of doing so if greatly increased in quantity. Here, the specific result is specified: “hair-coloring.” Context is central in claim construction, *see, e.g., Atlas IP, LLC v. Medtronic, Inc.*, 809 F.3d 599, 608 (Fed. Cir. 2015); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1321 (Fed. Cir. 2005) (en banc), and here the method claims’ focus on producing results suggests a focus on whether “hair coloring” results from the mixture actually applied to hair. *Cf. Cox Commc’ns, Inc. v. Sprint Commc’n Co. LP*, 838 F.3d 1224, 1232 (Fed. Cir. 2016) (“All of the asserted claims are method claims, so it makes sense to define the inventive method as a series of functions.”). It is beyond dispute that not only the chemical identity of molecules in the mixture, but the quantity of such molecules, matters to whether the mixture contains a constituent that in fact produces the result of hair coloring. Accordingly, it is one natural interpretation of the claim language, in context, to focus on what is actually present in the mixture, considering both chemical identity and quantity. In short, it is natural to say that a particular mixture “does not contain a hair-coloring agent,” despite the presence of certain identified molecules that if greatly increased in number could change hair color, if there are not enough of those molecules to actually change hair color.

We need not go further, however, and draw a firm conclusion about the words of the claim standing alone. This is a case in which the prosecution history speaks

clearly. The prosecution history confirms the above interpretation and adds precision.

Olaplex added the phrase at issue by amending claim 1 of the '419 patent during prosecution. As an initial matter, Olaplex had added the exclusion of a “coloring agent” to claim 1 as a preliminary amendment after the parent application of the '419 patent was rejected in light of prior art that used maleic acid itself in hair-dyeing products. At that point, the claim stated that it did not contain a “coloring agent.” Then Olaplex further amended the claim to contain the current language. Olaplex explained:

Claim 1 was further amended to specify the mixture does not contain a hair coloring agent. *The 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.*

J.A. 2325 (emphasis added). Olaplex immediately added: “This is in contrast to common agents that may be used to whiten or color *a hair care product*, but do not change the color or tone of hair when the hair care formulation is applied to hair based on visual inspection.” *Id.* (emphasis added).

This amendment supplies a definition: it says what “[t]he term ‘hair coloring agent’ refers to.” *Id.* That definition focuses on results: it requires that the colorant be one that “changes the color or tone of the hair it is applied to,” not merely that it could do so (if greatly increased in concentration). It identifies how the change is to be determined: by “visual inspection.” And it clearly distinguishes a colorant used to change the color of only the “hair care product” from one used to change the color of the hair to which the product is applied. We find Olaplex’s explanation in introducing the claim language to be clear and decisive. *See, e.g., Sunovion Pharms., Inc.*

v. Teva Pharms. USA, Inc., 731 F.3d 1271, 1276–77 (Fed. Cir. 2013).

Amendments and statements made during prosecution, which come after the filing of the application, may of course modify what claim-construction lessons might be drawn from the earlier-filed specification in the absence of such prosecution history. But here we see no inconsistency regardless. The specification identifies “hair coloring agents” separately from the more inclusive term “dyes.” *See, e.g.*, ’419 patent, col. 11, lines 20–33. That distinction fits the understanding that the former must actually color hair, while the latter may or may not. In addition, although the specification describes some agents, like “active agent[s],” in terms of specific formulations and concentrations (*see, e.g., id.*, col. 7, line 26 through col. 11, line 18), the specification sometimes describes others, like “bleaching agent[s],” in terms of their function (*see, e.g., id.*, col. 16, lines 54–55 (“bleaching formulation typically contains a bleaching agent to lighten the hair”)) without specifically identifying concentrations. Thus, nothing in the specification contradicts the understanding of the claim phrase “hair coloring agent” as referring to actually coloring hair at whatever concentration is used in the product.

In short, the district court relied on an incorrect claim construction. The record indicates that the district court, relying on a flawed claim construction, clearly erred in finding no likelihood of success on infringement on that basis. Accordingly, the denial of a preliminary injunction must be vacated at least as to direct infringement.

B

The denial of the preliminary injunction is vacated as to indirect infringement as well. In rejecting Olaplex’s allegation that L’Oréal indirectly infringed by inducing direct infringement by its customers, specifically salon technicians, the district court stated one reason in addition to the claim-construction rationale for rejecting the

direct-infringement allegation. It concluded that Olaplex had “not satisfied the knowledge requirement” for induced infringement because Olaplex failed to “demonstrate[] that [L’Oréal] *knew* that [its] customers’ acts [in following the products’ instructions for use] constitute infringement.” *District Court Opinion*, 2017 WL 2881351, at *4–5 (emphasis added). That conclusion is faulty.

As evidenced by the district court’s use of the past tense “knew,” the court considered only whether Olaplex could prove past knowing inducement. But patent infringement, including active inducement of infringement, is often “an ongoing offense that can continue after litigation has commenced.” *In re Seagate Tech., LLC*, 497 F.3d 1360, 1374 (Fed. Cir. 2007) (en banc), *abrogated on other grounds by Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016). And the point of a preliminary injunction is to provide prospective relief by stopping the ongoing conduct, whose wrongfulness depends on the facts at the time it would occur unless enjoined. *See LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 60 (Fed. Cir. 2012) (date of filing of complaint was “the date that [defendant] first became aware of the [patent at issue] and was therefore first potentially liable for active inducement of infringement”); *see also Seagate*, 497 F.3d at 1374 (even where claims of willful infringement focus on pre-filing conduct, if that conduct is ongoing, “a patentee can move for a preliminary injunction, which generally provides an adequate remedy for combating post-filing willful infringement”).

Accordingly, to obtain a preliminary injunction, Olaplex need not demonstrate that it is reasonably likely to succeed in proving that L’Oréal knew, before this suit began, that its instructions for use would induce infringement. Rather, Olaplex must demonstrate, *inter alia*, that it is reasonably likely to succeed in proving that the instructions for use induce infringement and that L’Oréal knows, at the time a preliminary injunction is to

take effect, that the instructions for use will induce infringement. *See Sanofi v. Watson Labs., Inc.*, 875 F.3d 636, 643 (Fed. Cir. 2017) (discussing the knowledge requirement for induced infringement in the context of drug labels). Our claim construction today makes it likely that the knowledge element for inducement of infringement may be satisfied when, on remand, the district court reconsiders entry of a preliminary injunction.¹

II

The errors we have identified regarding claim construction and infringement require a vacatur of the denial of the preliminary injunction and a remand for proceedings consistent with this opinion. In view of the need for a remand, we address other arguments made by L'Oreal.

We note first that, other than the likelihood of success on the merits, the only factor in the preliminary-injunction analysis that the district court itself found to weigh against Olaplex was that a preliminary injunction would not be in the public interest. *District Court Opinion*, 2017 WL 2881351, at *7. But the sole rationale given by the district court for that determination was that “the public interest is not served by protecting valid patents as against noninfringing uses.” *Id.* That finding is entitled to no weight, because it rests on the district court’s erroneous claim-construction and noninfringement analysis.

The district court did not rest its denial of the requested preliminary injunction on any of the other bases advanced by L'Oréal for denying the injunction. Here, we address such bases only in a limited way. We partially

¹ We note that the Supreme Court has held that a belief regarding possible invalidity—discussed *infra*—does not negate knowledge of infringement. *Commil USA, L.L.C. v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1928–31 (2015).

address two invalidity contentions made by L'Oréal: we indicate that one of the contentions does not appear to have the merit required to defeat a request for a preliminary injunction, while another may well have such merit and demands full reconsideration on remand. We also indicate why L'Oréal's challenge to the district court's finding in Olaplex's favor on the irreparable-harm and balance-of-equities issues is unpersuasive. We remand for further proceedings, on which developments since the initial preliminary-injunction proceedings may have a bearing.

A

It is the patent holder's burden, when moving for a preliminary injunction, to establish a likelihood of success on the merits. *Entegris, Inc. v. Pall Corp.*, 490 F.3d 1340, 1351 (Fed. Cir. 2007); *Nat'l Steel Car, Ltd. v. Canadian Pac. Ry., Ltd.*, 357 F.3d 1319, 1324–25 (Fed. Cir. 2004). If the alleged infringer presents a “substantial question” of invalidity, and the patent holder does not establish the likely lack of merit of the invalidity contention, the preliminary injunction should not issue. *Entegris*, 490 F.3d at 1351; *accord Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1364 (Fed. Cir. 1997). The burden on the challenger to show a substantial question of invalidity at this stage is lower than what is required to prove invalidity at trial. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1359 (Fed. Cir. 2001) (“In resisting a preliminary injunction . . . one need not make out a case of actual invalidity The showing of a substantial question as to invalidity thus requires less proof than the clear and convincing showing necessary to establish invalidity itself.”).

1

The district court tentatively stated a possible invalidity-based ground for finding that Olaplex was unlikely to succeed on the merits. It observed that Olaplex's pro-

posed construction requires a “visual inspection” to determine whether a product infringes, rather than providing a “method, standard, or any other objective measure” to determine when a substance was a hair-coloring agent. *District Court Opinion*, 2017 WL 2881351, at *4. For that reason, the court concluded, the claims if construed as Olaplex proposed (and as we have done) would “most likely” be indefinite. *Id.*

We review a district court’s legal conclusion of indefiniteness de novo and the underlying factual findings for clear error. *Cox Commc’ns*, 838 F.3d at 1228. To be definite, the claims must “inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). On the record before us, we do not think that L’Oréal has raised a “substantial question” of indefiniteness.

Our recent precedent establishes the incorrectness of the district court’s rationale for thinking indefiniteness likely. Indefiniteness does not necessarily follow from a claim’s reliance on visual inspection with the human eye. *Sonix Tech. Co., Ltd. v. Publ’ns. Int’l., Ltd.*, 844 F.3d 1370, 1378 (Fed. Cir. 2017) (“The question whether something is ‘visually negligible’... involves what can be seen by the normal human eye. This provides an objective baseline through which to interpret the claims.”). In this case, there is ample evidence in the record that the identified persons of ordinary skill in the art of hair-care products know how to use visual inspection to determine with reasonable certainty whether a certain ingredient in a product would actually alter the color of hair.

As for the intrinsic evidence, many examples in the ’419 patent call for visual inspection. In particular, the “Results” section of Example 7 reports that, “[u]pon visual inspections, the second hair sample treated with the active agent formulation showed little or no signs of

breakage,” while “the first hair sample treated with hydrogen peroxide showed significant breakage.” ’491 patent, col. 25, lines 4–7; *see also, e.g., id.*, col. 22, lines 61–64 (Example 3 results: “A noticeable difference in hair quality,” as sample treated according to claimed method was “less frizzy, appeared hydrated, with more shine than the control”); *id.*, col. 23, line 65 through col. 24, line 2 (Example 4 results: “healthy appearance” of hair treated according to claimed method as compared to “frayed with an unhealthy appearance” of control). Regarding visual inspection of color, Example 1 notes the “better color retention” in the hair sample treated according to the claimed method than in the control. *Id.*, col. 21, lines 44–48; *see also, e.g., id.*, col. 22, lines 15–19 (Example 2 results: “active agent formulation displayed a color closer in intensity to the hair sample prior to the first washing, compared to the hair treated with hydrogen peroxide”).

Extrinsic evidence also rebuts L’Oréal’s contention that the claims are indefinite. The internal testing results submitted by L’Oréal show its own application of the very same rubric—to determine whether or not the level of coloring in L’Oréal’s products would change the color of hair, L’Oréal’s scientists were conducting tests *based on visual inspection*. J.A. 5432; J.A. 6767 (“Conclusion: . . . there is no significant *visible* difference”) (emphasis added). Such evidence of a challenger’s own ability to apply a term without unreasonable uncertainty counts against an indefiniteness contention. *See BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1368 (Fed. Cir. 2017); *Sonix*, 844 F.3d at 1379–80. L’Oréal observes that the court in *Sonix* relied on detailed examples given in the patent’s specification, but the ’419 specification in this case itself includes examples that require visual inspection of the hair and its color. In any event, the evidence cited above that a person of ordinary skill in the art would know how to visually inspect hair for color change is

sufficient to show a likelihood of success in defending against an indefiniteness challenge.

Finally, L'Oréal points to expert testimony that damaged hair more readily takes up dye than undamaged hair, and therefore that a specific concentration of a coloring agent may color a damaged hair sample but not an undamaged hair sample, rendering the claims indefinite. But L'Oréal presents no evidence that the dye-uptake properties of damaged and undamaged hair are so disparate as to prevent reasonable certainty among persons of skill as to whether hair, damaged or undamaged, will be colored by a mixture containing a particular concentration of a coloring agent. L'Oréal itself tested its products on gray and on permed (damaged) hair to confirm that its products would not color the hair. *See, e.g.*, J.A. 5431. “[T]he certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter.” *Nautilus*, 134 S. Ct. at 2129. L'Oréal has not shown a substantial question under that standard.

2

L'Oréal argued before the district court that the '419 patent claims are invalid for obviousness in light of two references: Ogawa and Kim. *District Court Opinion*, 2017 WL 2881351, at *5–6.² The district court rejected the

² L'Oréal also argued anticipation based on Ogawa, but the district court rejected the argument at the present stage of the case, stating, *e.g.*, that it had “not explained how Ogawa applies in light of either of [Olaplex’s] claim constructions.” *District Court Opinion*, 2017 WL 2881351, at *5. L'Oréal argued as well that the patent failed to name an inventor, but the district court rejected the argument at this stage, stating, *e.g.*, that L'Oréal had “not demonstrated that [Olaplex] could not correct inventor-

contention. It stated: “At this stage in the proceedings, the court is not inclined to second guess the assessment of the examiner, who had the Ogawa and Kim references before her, and who we assume had some expertise in interpreting the references and some familiarity with the level of skill in the art.” *Id.* at *6 (internal quotation marks omitted). The court added that L’Oréal had “not shown that [it] could carry [its] burden to prove obviousness by clear and convincing evidence.” *Id.*

We do not read this explanation as giving blanket deference to the PTO, which would be impermissible, *see Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prods. Grp., LLC*, No. 2016-2197, slip op. at 9–10 (Fed. Cir. Jan. 12, 2018). But the district court set forth no independent discussion of the merits of the obviousness challenge. We think that such a discussion is needed.

After the district court entered its decision denying a preliminary injunction, the Patent Trial and Appeal Board instituted a Post-Grant Review of claims 1–8 and 10 of the ’419 patent, concluding that those claims are more likely than not unpatentable for obviousness over the combination of Ogawa and two other references—German Patent Application Publication No. 1,220,969 (Berkemer) and Korean Patent Application Publication No. 10-2006-0059564 (KR ’564). *L’Oréal USA, Inc. v. Liqwd, Inc.*, PGR2017-00012, 2017 WL 3085428, at *4–8.

ship if a trier of fact were to determine” that an inventor was unnamed. *Id.* at *6. The district court did not address L’Oréal’s contention that Olaplex does not qualify as a “patentee” entitled to sue for patent infringement under 35 U.S.C. § 281—an issue to which the parties each devote all of a paragraph in their briefs on appeal. We do not further discuss any of these three issues, which may be further explored on remand.

(P.T.A.B. July 19, 2017).³ In particular, the Board found that Ogawa disclosed all of the limitations of claim 1 of the '419 patent except the selection of maleic acid from among various potential agents and that Berkemer provided motivation for a person of skill in the art to select maleic acid from the other potential options. *Id.* at *5–6. At the same time, the Board noted that there were substantial unresolved questions related to secondary considerations, and so it stressed that its conclusions were being drawn “on the present record and for the purposes of the present decision.” *Id.* at *8.

We rely on the Board’s opinion here for a limited purpose. Having carefully examined the obviousness issue presented to us in this appeal, we think that the content of the Board’s discussion shows the need for the district court, in the case before us, to present a fuller discussion of the obviousness evidence and arguments than the opinion under review here contains. We do not defer to the Board’s preliminary institution decision or assert agreement with all of the Board’s analysis. We merely find it sufficient to indicate why there may well be a “substantial question” of invalidity here, necessitating more analysis in this case than we now have.

³ The Board also drew the same conclusion regarding another combination of references. *Id.* at *8–11. The Board found no sufficient basis to institute a review of unpatentability for anticipation by Ogawa. *Id.* at *3–4.

The same day that the Board instituted a review of unpatentability for obviousness, it separately declined to institute a review of unpatentability for indefiniteness, lack of written-description support, and lack of enablement. *L’Oréal USA, Inc. v. Liqwd, Inc.*, PGR2017-00011, 2017 WL 3085427 (P.T.A.B. July 19, 2017).

B

L'Oréal challenges the district court's finding that Olaplex would suffer irreparable harm in the absence of a preliminary injunction. *District Court Opinion*, 2017 WL 2881351, at *6. We see no clear error of fact (or legal error) in the court's finding. *See New England Braiding Co., Inc. v. A.W. Chesteron Co.*, 970 F.2d 878, 882 (Fed. Cir. 1992) (preliminary-injunction factors reviewed for clear error). But we do not preclude reconsideration of the issue when the case returns to the district court, by which time the market will have changed since July 2017 in ways of potential relevance to the irreparable-harm question. *See Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1384 (Fed. Cir. 2017).

L'Oréal argues in particular that the district court erred in finding that the “bond-builder” market is a “two-player national market.” Appellees’ Br. 55 (citing *District Court Opinion*, 2017 WL 2881351, at *6). L'Oréal notes the district court's statements that the bond-builder market is “new and growing” and that “other competitors have appeared” since 2014, and it cites portions of the record discussing hair-care products such as Colorplex, Eslabondexx, and B3 Brazilian Bond Builder. Appellees’ Br. 55–56 (citing, e.g., J.A. 3243–45). But the district court considered those products and found them to fall into the market category of “additives” or “conditioning products” rather than “bond-builders.” *District Court Opinion*, 2017 WL 2881351, at *6. The court credited the testimony of Olaplex's expert Dr. Nisha Mody, who stated that only Olaplex and L'Oréal sold bond-builder products in the national market, J.A. 483–84, over the testimony of L'Oréal's expert W. Todd Schoettlekotte, who opined that the market included other products such as those mentioned above, J.A. 2911–12. *Id.* at *6 n.13. When the court referred to “other competitors,” it was referring to L'Oréal's expert's expanded “bond-builder/additive mar-

ket,” which the court determined was not the relevant market for the assessment of irreparable harm. *Id.* at *6.

We conclude that the district court did not err when it determined that the bond-builder market is a “two-player national market” and that Olaplex would likely suffer irreparable harm from L’Oréal’s “direct competition in [its] primary market.” *Id.*; see also *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013) (“Where two companies are in competition against one another, the patentee suffers the harm—often irreparable—of being forced to compete against products that incorporate and infringe its own patented inventions.”); *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1151 (Fed. Cir. 2011) (“the existence of a two-player market may well serve as a substantial ground for granting an injunction”). We need not here consider issues that might arise in a situation in which more firms are in the market but their products are themselves infringing. It suffices to say here that L’Oréal has not shown the district court’s two-player-market finding to be clearly erroneous. Nor has it otherwise shown reversible error in the irreparable-harm finding or in balancing the equities on the present record. As noted, however, the irreparable-injury issues may be reconsidered on remand, which could lead to a change in the balancing of the equities.

L’Oréal also argues that the district court erred by concluding that the balance of the equities favored granting the injunction. But L’Oréal makes its argument contingent on its irreparable-harm arguments, stating, “the district court relied principally on the purported harm to Olaplex, which itself is insufficient to warrant injunctive relief.” Appellees’ Br. 56. Because we do not find reversible error in the district court’s finding of irreparable harm to Olaplex, this argument likewise fails.

III

For the foregoing reasons we vacate the district court's denial of a preliminary injunction and remand for further proceedings in accordance with this opinion.

Costs awarded to appellants.

VACATED AND REMANDED