In the Supreme Court of the United States

AMARIN PHARMA, INC. ET AL., PETITIONERS

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HIKMA PHARMACEUTICALS USA INC., ET AL.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

BRIEF OF LIQUIDPOWER SPECIALTY PRODUCTS INC. AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

EDWARD R. REINES WEIL, GOTSHAL & MANGES LLP Redwood Shores, CA 94065

ELIZABETH S. WEISWASSER COLIN F. MCGRATH WEIL, GOTSHAL & MANGES LLP 767 Fifth Avenue New York, NY 10153

ZACHARY D. TRIPP Counsel of Record 201 Redwood Shores Parkway Weil, Gotshal & Manges LLP 2001 M Street NW Washington, DC 20036 (202) 682-7000 zack.tripp@weil.com

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v.

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BRIEF OF LIQUIDPOWER SPECIALTY PRODUCTS INC., AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

INTEREST OF AMICUS CURIAE1

Amicus curiae LiquidPower Specialty Products Inc. (LSPI) is a global market leader in the science of fluid drag reduction and its application for improving pipeline flow. Since 1973, LSPI has pioneered major advances in pipeline operations. Its innovations have helped operators significantly increase pipeline throughput while reducing energy consumption. LSPI employs numerous technical professionals and scientists, and runs a preeminent research and development center for drag reduction.

¹ Pursuant to S. Ct. Rule 37.6, counsel for all parties have consented to the filing of this brief. No counsel for a party authored this brief in whole or in part and no person or entity other than the *amicus curiae* or counsel made a monetary contribution to its preparation or submission.

As a lead innovator in drag reduction technology, LSPI invests heavily in research and development and provides its customers with an array of products based on its patented discoveries. Its patents are important assets that are integral to LSPI's business, and its ability to obtain and rely on patent protection allows it to continue innovating. Given its focus on developing new products through research, LSPI has a significant interest in the proper functioning of the patent system.

LSPI also has a significant interest in the proper resolution of the question presented because LSPI has faced the same error in two cases (and two appeals) arising from *inter partes* reviews before the Patent Trial and Appeal Board, See Baker Hughes, a GE Co., LLC v. LiquidPower Specialty Prods. Inc., IPR2016-00734; Baker Hughes, a GE Co., LLC v. LiquidPower Specialty Prods. Inc., IPR2016-01903; see also LiquidPower Specialty Prods. Inc. v. Baker Hughes, a GE Company LLC, 749 Fed. Appx. 965, 968 (Fed. Cir. 2018) (LSPI I); LiquidPower Specialty Prods. Inc. v. Baker Hughes, a GE Company LLC, 810 Fed. Appx. 905, 906-907 (Fed. Cir. 2020) (LSPI II). In both cases, LSPI introduced extensive objective evidence showing that its patented claims were significant and indeed surprising technological breakthroughs. Yet application of the prima facie approach to obviousness has prevented the Board from properly considering the importance of that evidence and instead has significantly increased the likelihood that LSPI's patents will be improperly invalidated based on hindsight bias.

SUMMARY OF ARGUMENT

Obviousness is a central issue in patent law, and this Court should grant certiorari to answer an important and recurring question at the heart of that inquiry: What is the proper role of objective evidence, such as evidence showing that experts in a field doubted that prior art could successfully be combined? Is objective evidence only to be considered after the other facets of the obviousness inquiry, merely to decide whether it outweighs or knocks down a *prima facie* showing of obviousness? Or must all the evidence of obviousness, including objective evidence, "be considered collectively," In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig., 676 F.3d 1063, 1078 (Fed. Cir. 2012) (Cyclobenzaprine), so that the objective evidence can shed light on the entire inquiry, including how big a leap it actually was to combine prior art references, or whether (or not) a person with ordinary skill in the art actually would have been motivated to combine the prior art with reasonable expectation of success?

The district court in this case and many Federal Circuit panels have embraced an approach that uses objective evidence merely to rebut an initial "prima facie" showing of obviousness. That approach conflicts with the holistic framework the Court set forth in Graham v. John Deere Company of Kansas City, 383 U.S. 1 (1966) and KSR International Co. v. Teleflex Inc., 550 U.S. 398 (2007). As those decisions recognize, objective evidence is particularly valuable because it "guard[s] against slipping into use of hindsight" and helps "resist the temptation to read into the prior art the teachings of the invention." Graham, 383 U.S. at 36. Yet under the prima facie approach, courts make critical determinations—such as whether a person with ordinary skill in

the art would have been motivated to combine prior art references with a reasonable expectation of success—without the benefit of objective evidence and thus without its protection from hindsight bias. When the fact-finder refuses even to reconsider those findings in light of the objective evidence, then the damage is already done and the error is effectively set into stone.

Federal Circuit judges have recognized the significance of this issue. As Judge Reyna put it, the application of the *prima facie* approach poses a "grave concern." *Intercontinental Great Brands LLC* v. *Kellogg N. Am. Co.*, 869 F.3d 1336, 1353 (Fed. Cir. 2017) (Reyna, J., dissenting in part). And the issue arises with considerable frequency. See, *e.g.*, *Merck Sharp & Dohme Corp.* v. *Hospira*, *Inc.*, 874 F.3d 724, 732–34 (Fed. Cir. 2017) (Newman, J., dissenting) (collecting cases). The issue arises in virtually any case involving objective evidence of obviousness.

Indeed, LSPI is facing this very error in two cases arising from *inter partes* review proceedings before the Patent Trial and Appeal Board. In those cases, LSPI introduced extensive objective evidence showing that its patents relating to a drag-reducing agent for heavy crude oil were far from obvious at the time of the invention, and instead were "recognized in the industry as a pioneering technological breakthrough." See, *e.g.*, *LSPI I*, 749 Fed. Appx. at 968. For example, LSPI introduced evidence showing that industry scientists were skeptical an additive could effectively reduce drag in heavy crude, and then were stunned when they learned how well LSPI's patents worked.

Yet in the first case, after a remand to consider the objective evidence that it had initially ignored, the Board refused even to reconsider its prior findings that

a skilled artisan would have been motivated to combine the prior art and would have reasonably expected success—notwithstanding that LSPI's objective evidence of skepticism and surprise undercut those very findings. IPR2016-00734, Paper No. 93, at 8-10 (Nov. 19, 2019). The Board's key findings in its obviousness analysis thus remained infected with hindsight bias, and the objective evidence could never fulfil its key role. And in the second case, the Federal Circuit affirmatively directed the Board not to reconsider its prior *prima facie* findings in light of the objective evidence, and instead merely to "weigh" the objective evidence against those preexisting findings. LSPI II, 810 Fed. Appx. at 906-907. The Federal Circuit foreclosed LSPI from using objective evidence to prove, among other things, that a person with ordinary skill in the art would not have been motivated to combine the prior art and would not have expected success, and thereby to counteract hindsight bias.

This case is also a good vehicle for answering the question presented, because the district court's order squarely embodies the *prima facie* approach: the court failed to use objective evidence to evaluate whether there was a motivation to combine with a reasonable expectation of success, and instead only weighed the objective evidence against its *prima facie* findings—that were made unguarded against hindsight bias. See Pet. App. 91a-92a (finding that petitioners' secondary consideration evidence did not "overcome" the lower court's "finding that all Asserted Claims are *prima facie* obvious"). This Court should grant certiorari and reverse.

ARGUMENT

- I. The Federal Circuit's "Prima Facie Obviousness" Approach Conflicts With This Court's Precedents And Leads To The Invalidation Of Important Patent Rights Based On Hindsight Bias
- 1. Under the Patent Act, 35 U.S.C. 101 *et seq.*, a claimed invention is not patentable if it would have been "obvious" to a person of ordinary skill in the art based on the prior art at the time of the invention. See 35 U.S.C. 103. In *Graham* v. *John Deere Co. of Kansas City*, 383 U.S. 1 (1966), this Court set out four factors for evaluating obviousness: (1) "the scope and content of the prior art"; (2) "differences between the prior art and the claims at issue"; (3) "the level of ordinary skill in the pertinent art"; and (4) "[s]uch secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc." *Id.* at 17-18.² The secondary considerations outlined in *Graham* are also known as "objective indicia" of nonobviousness.

As a practical matter, "inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Courts accordingly look for "reason[s] that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Ibid.*; see *ibid.* (describing considerations such as the background knowledge of a skilled artisan

² Other objective indicia include industry praise, copying by others, acceptance by others, initial skepticism, and unexpected results. See *Apple Inc.* v. *Samsung Elecs. Co.*, 839 F.3d 1034, 1052 (Fed. Cir. 2016) (en banc); *Kinetic Concepts, Inc.* v. *Smith & Nephew, Inc.*, 688 F.3d 1342, 1367 (Fed. Cir. 2012).

and the teaching of prior art as inquiries necessary for determining "whether there was an apparent reason to combine the known elements in the way a patent claims"). A factfinder thus will assess whether "a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention," and whether "the skilled artisan would have had a reasonable expectation of success in doing so." *Pfizer*, *Inc.* v. *Apotex*, *Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007).

Objective evidence is particularly valuable because it "guard[s] against slipping into use of hindsight" and helps "resist the temptation to read into the prior art the teachings of the invention." Graham, 383 U.S. at 36: see also KSR, 550 U.S. at 421 ("A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning."). Congress directed that the obviousness inquiry looks at the situation "before the effective filing date of the claimed invention," i.e., to the time the patent was filed, not the later point in time when the patent's validity is being challenged. 35 U.S.C. 103. But once a patentholder has successfully combined existing prior art elements, it can be all too easy to conclude that it was obvious ex ante to think of successfully combining them and that doing so would work.

Objective evidence can vividly show that the opposite is true. For example, objective evidence about industry demand can show that a long-felt but unmet need in the marketplace created a strong incentive to produce the claimed invention, yet for many years nobody combined the prior art in the claimed manner—illustrating that the combination was not actually obvious *ex ante*. See, *e.g.*, *Alco Standard Corp.* v. *Tennessee Valley Auth.*, 808

F.2d 1490, 1500 (Fed. Cir. 1986) (affirming nonobviousness determination based on finding that industry had searched "for well over a decade" for a method for identifying flaws in turbine rotators, and that manufacturers "failed to develop a reliable method" for inspection). Or objective evidence can show skepticism that the combination would solve the problem, or surprise that the combination was actually successful in solving it. See, e.g., United States v. Adams, 383 U.S. 39, 51-52 (1966). And "there can be little better evidence negating an expectation of success than actual reports of failure." Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 320 F.3d 1339, 1354 (Fed. Cir. 2003).

2. The Federal Circuit has developed two divergent approaches to considering objective evidence. In the past, the Federal Circuit employed a holistic approach requiring that "all evidence relevant to obviousness or nonobviousness be considered, and be considered collectively." In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig., 676 F.3d 1063, 1077-1078 (Fed. Cir. 2012) (emphasis added). Under that approach, "[t]he objective evidence of unobviousness is not evaluated for its 'separate knockdown ability' against the 'stonewall' of the *prima facie* case," but "considered together with all other evidence, in determining whether the invention as a whole would have been obvious." Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc., 98 F.3d 1563, 1570 (Fed. Cir. 1996).

More recently, however, the Federal Circuit's decisions have swung in a different direction. Under its current approach—which the district court's decision in this case exemplifies—the factfinder assesses the first

three *Graham* factors in a vacuum to make a *prima facie* assessment of obviousness. If a *prima facie* case is made that the patent is obvious, the court then looks to any objective evidence to determine whether it outweighs, knocks down, or rebuts the *prima facie* case. See, *e.g.*, Pet. App. 75a-92a; see also, *e.g.*, *Intercontinental Great Brands LLC* v. *Kellogg N. Am. Co.*, 869 F.3d 1336, 1346 (Fed. Cir. 2017).

This case presents the important and recurring question of which of these two approaches is correct.

3. The *prima facie* approach the district court applied and the Federal Circuit upheld is wrong. First, the *prima facie* approach prevents objective evidence from fulfilling its key role of protecting against hindsight bias, and in turn improperly places a thumb on the scale in favor of invalidating patents. The *prima facie* approach involves an initial determination that the claimed invention was obvious in light of the prior art references—but without considering the secondary evidence at all—thereby relegating the objective evidence to trying to displace a conclusion that the factfinder has already reached. As Federal Circuit Chief Judge Markey once explained:

An earlier decision should not ... be considered as set in concrete, and applicant's rebuttal evidence then be evaluated only on its knockdown ability. Analytical fixation on an earlier decision can tend to provide that decision with an undeservedly broadened umbrella effect.

In re Rinehart, 531 F.2d 1048, 1052 (C.C.P.A. 1976). Quite simply, if the decisionmaker does not look at objective evidence until after already determining that the patent appears to be invalid, then hindsight can have

already infected the decisionmaking; the initial determination of obviousness becomes harder to dislodge; and the objective evidence will often be too little, too late. See Daniel Kahneman, *Thinking, Fast and Slow* 202 (2011) ("A general limitation of the human mind is its imperfect ability to reconstruct past states of knowledge, or beliefs that have changed. Once you adopt a new view of the world (or of any part of it), you immediately lose much of your ability to recall what you used to believe before your mind changed.").

For example, under the *prima facie* approach, a factfinder could determine by comparing prior art references that a person with ordinary skill in the art would have been motivated to combine them with a reasonable expectation of success—without considering objective evidence showing that a skilled artisan would not actually select those "particular references in order to combine their elements." WBIP, LLC v. Kohler Co., 829 F.3d 1317, 1337 (Fed. Cir. 2016). Where the factfinder fails to consider objective evidence in that analysis, it relegates the evidence to a mere rebuttal role, even if the factfinder weighs the objective evidence before reaching its obviousness determination. If the factfinder first concludes without looking at the objective evidence that there was a motivation to combine with reasonable expectation of success, and the factfinder later refuses to reconsider those findings in light of the objective evidence, then hindsight bias will have already distorted a key inquiry and later considering the "weight" of the objective evidence will not undo the harm. Indeed, objective evidence "may often be the most probative and cogent evidence in the record" and accordingly should "be considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing the art." Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538-1539 (Fed. Cir. 1983).

Second, this Court has emphasized that the obviousness inquiry is "expansive," "flexible," and "broad." *KSR*, 550 U.S. at 415. And the Court has explained that "the sequence of the[] questions" "might be reordered in any particular case," meaning that objective evidence could be considered first, before the other evidence of obviousness. *Id.* at 406-407. Yet under the *prima facie* approach, each step is narrow and stovepiped and comes in a predefined order, with the factfinder always considering objective evidence last.

Third, as the Court instructed in KSR, a factfinder's obviousness analysis "should be made explicit" "to facilitate review." 550 U.S. at 418. But the prima facie approach often obscures the treatment of objective evidence. When a factfinder has already made a prima facie determination that a combination was obvious, there is often little left to say when considering whether the secondary evidence rebuts or overcomes that showing beyond stating the conclusion that it was (or was not) sufficient. For example, the district court here surveyed each item and stated whether each weighed for (or against) a finding of obviousness, e.g., Pet. App. 91a (evidence of commercial success "weighs in favor of finding the Asserted Claims nonobvious"), before merely stating the conclusion that the objective evidence "d[id] not overcome" the prima facie case, id. at 92a. Under that approach, it is very difficult for a reviewing court to assess how the objective evidence actually impacted the analysis besides being insufficient to alter the factfinder's conclusion.

By contrast, when objective evidence is considered as an integral part of the obviousness inquiry, the court's analysis becomes more explicit. A court might, for example, explain that the language of the prior art patents suggests that a person of ordinary skill in the art would reasonably expect success in a combination, but evidence that skilled scientists in the field were actually surprised by the result could led the court to the opposite conclusion. Under that approach, a reviewing court can readily see why the objective evidence was relevant and how it impacted the factfinder's decisionmaking.

II. This Is An Important And Frequently Recurring Issue At The Heart Of Patent Law

A. This Issue Is Important And Recurs With Considerable Frequency

The question presented warrants this Court's review. The nonobviousness requirement is the "most litigated of the conditions of patentability." 2 Donald S. Chisum, *Chisum on Patents* § 5.06 (2020). And the question presented lies at the heart of the inquiry: How is objective evidence actually used? What role does it actually play in an assessment of obviousness?

Judges of the Federal Circuit have repeatedly recognized both the importance of this issue and that it arises frequently. For example, Judge Reyna has collected cases endorsing the *prima facie* framework and described the issue as a "grave concern" because "application of a prima facie test ... necessarily achieves a legal determination of obviousness prior to full and fair consideration of evidence of objective indicia of non-obviousness." *Intercontinental Great Brands*, 869 F.3d at 1353 (Reyna, J., dissenting in part); see also *Merck Sharp & Dohme Corp.* v. *Hospira, Inc.*, 874 F.3d 724, 731-733 (Fed. Cir. 2017) (Newman, J., dissenting) (collecting cases and explaining that "it is incorrect to consign the

objective evidence to rebuttal against the other three *Graham* factors").

Not only does this issue arise frequently, but panels of the Federal Circuit have recently shifted from applying a holistic approach to objective evidence to following a prima facie approach that devalues the evidence. For example, in 2012, the court in Cyclobenzaprine explained that some panels "have spoken of the obviousness analysis in terms of a 'prima facie' case which must then be 'rebutted' by the patentee." 676 F.3d at 1076. The panel found that approach to be contrary to the Supreme Court's view that "all evidence relevant to obviousness" must "be considered collectively." Id. at 1078. Similarly, in Nike, Inc. v. Adidas AG, 812 F.3d 1326 (Fed. Cir. 2016), a panel directed the Board on remand "to examine Nike's [objective] evidence and its impact, if any, on the Board's analysis under the first three Graham factors." Id. at 1340; see also Apple Inc. v. Int'l Trade Comm'n, 725 F.3d 1356, 1365-1366 (Fed. Cir. 2013) (similar).

By contrast, after *Cyclobenzaprine*, Federal Circuit panels have swung in a different direction by employing or affirming a *prima face* approach. For example, in *Intercontinental Great Brands*, a panel in 2017 rejected the contention that "objective indicia must be evaluated before drawing a conclusion about whether a reasonable jury could find that a relevant skilled artisan had a motivation to combine the prior art," instead holding that it was sufficient merely to evaluate the objective evidence "before drawing the ultimate obviousness conclusion." 869 F.3d at 1346. And the Federal Circuit has repeatedly sustained district court determinations that "that the secondary consideration evidence did not overcome the showing of obviousness based on the prior art."

Cubist Pharm., Inc. v. Hospira, Inc., 805 F.3d 1112, 1130 (Fed. Cir. 2015); e.g., Merck, 874 F.3d at 732-733 (similar).

This case is a paradigmatic example. The district court expressly applied a prima facie framework, "first discuss[ing]" petitioners' "prima facie obviousness case" under a heading titled, "Prima Facie Obviousness." Pet. App. 75a-76a; see id. at 76a-81a. Only after determining that the claims at issue were prima facie obvious did the court "turn[] to consideration of [petitioners'] proffered secondary considerations," id. at 81a, ultimately concluding that the objective evidence did not "overcome" its prior conclusion, id. at 92a. Petitioners appealed, arguing that it was legal error to relegate objective evidence to a role of rebutting or overcoming a conclusion that otherwise has already been reached. See Appellants' C.A. Br. 33-46. Yet the Federal Circuit affirmed without even issuing any opinion. Pet. App. 1a-2a. The Federal Circuit thus treated the serious and recurring analytical error here as unremarkable.

B. This Issue Arises In A Variety Of Contexts And Has Significant Consequences For LSPI And Other Innovators

As petitioners note, see Pet. 27 n.8, the question presented arises frequently both in patent infringement actions like this one and in *inter partes* review (IPR) proceedings before the Patent Trial and Appeal Board. Under federal law, any person may petition the Board to initiate *inter partes* review of a patent, including the question of whether it was obvious. See 35 U.S.C. 311(a) and (b). The Board initiates hundreds of IPRs each year, frequently invalidating previously-issued patents on obviousness grounds. See Patent Trial and Appeal Board, *Boardside Chat: New Developments* 13, 15 (June 11,

2020) (reporting that the Board instituted between 568 and 789 IPRs annually in Fiscal Years 2015 through 2019, and that from Fiscal Year 2011 through 2019, the Board found claims unpatentable in 56% of IPRs in which it issued a final written decision).³ This same issue about the proper role of objective indicia evidence in turn frequently arises in IPR proceedings and Federal Circuit appeals arising from the Patent Trial and Appeal Board. See, *e.g.*, *In re Depomed*, *Inc.*, 680 Fed. Appx. 947, 953-956 (Fed. Cir. 2017) (Reyna, J., concurring).

LSPI is currently litigating two cases that raise this issue and vividly illustrate the importance of the question presented. See *Baker Hughes*, a GE Co., LLC v. LiquidPower Specialty Prods. Inc., IPR2016-00734; Baker Hughes, a GE Co., LLC v. LiquidPower Specialty Prods. Inc., IPR2016-01903. Both cases involve LSPI's innovations in reducing drag in the shipment of heavy crude oil.

Heavy crude is notoriously difficult to transport by pipeline because friction or "drag" results from the resistance between the fluid and the pipeline wall. LSPI developed a groundbreaking drag reducing polymer that is used to improve the flow of heavy asphaltenic crude oil via pipeline, as well as methods for using such a polymer to reduce drag. See, *e.g.*, U.S. Patent No. 8,022,118. The embodying product, ExtremePower®, was "recognized in the industry as a pioneering technological breakthrough." *LSPI I*, 749 Fed. Appx. at 968.

Baker Hughes, one of LSPI's competitors, responded by marketing a copycat product and LSPI sued for infringement. See *LiquidPower Specialty Products Inc.* v.

³ https://www.uspto.gov/sites/default/files/documents/PTAB_boardside_chat_new_trial_stats_sas_and_operational_faqs_06_11_2020.pdf.

Baker Hughes, a GE Company, LLC et al., No. 4:15-cv-02915 (S.D. Tex. Oct. 5, 2015). Baker Hughes then petitioned the Board to review the validity of LSPI's patents, and the Board initiated two IPRs.

In each of the proceedings, Baker Hughes asserted that LSPI's claims were obvious in light of prior art references—but LSPI introduced extensive objective evidence that the claims were actually a breakthrough. For example, LSPI introduced evidence showing that, before LSPI introduced ExtremePower®, the belief in the industry was that such drag-reducing polymers "[do] not work effectively" with heavy crude. Doc. 24 at 9, 14 in LSPI II, supra (citing J.A. 7180, 7191). Scientists at Baker Hughes in turn were skeptical that it could work, deriding LSPI's product as "mainly a marketing effort." Id. at 14, 44-45 (citing J.A. 7433). But when the scientists tested ExtremePower®, its efficacy stunned them—they described the results as "pretty scary, and I mean it." Id. at 41, 45 (citing J.A. 7439).

LSPI also introduced evidence of commercial success—including its competitor's acknowledgment that the product was "the only [drag-reducing agent] capable of providing drag reduction in heavy crudes" and achieved "very high margins." Doc. 24 at 13-15 in LSPI II, supra (citing J.A. 7388). Facing customer demand, Baker Hughes tried to create a substitute—and failed. It then resorted to outright copying, introducing an infringing product that it touted as a technological advancement. Id. at 17, 42, 45 (citing J.A. 7421, 7423, 7805). Further, LSPI showed that another competitor introduced a knock-off product. When LSPI sued for infringement, the competitor stipulated to the validity of

the LSPI patents, withdrew its product from the market, and accepted an injunction. *Id.* at 55 (citing J.A. 7700-7703).

Yet application of the *prima facie* approach by the Federal Circuit and the Board has nonetheless put LSPI's patents at risk of invalidation. In the first case, the Board initially invalidated LSPI's patents based solely on the *prima facie* factors, without even considering the objective evidence. See LSPII, 749 Fed. Appx. at 968. The Federal Circuit reversed and remanded, determining that it was error for the Board not to consider the evidence of "long-felt but unsolved need, failure of others, skepticism of experts, unexpected results, industry praise, commercial success, copying, and acquiescence to an injunction." *Ibid*. Yet on remand, the Board refused to use the objective evidence to reconsider any aspect of the *prima facie* inquiry, and instead relegated the secondary evidence to the limited role of assessing whether it "outweighed" or rebutted the conclusion the Board had otherwise already reached. See IPR2016-00734, Paper No. 93, at 8-10 (Nov. 19, 2019).

Unsurprisingly, with its inquiry largely unchanged, the Board reached the same result and once again invalidated the patents. See IPR2016-00734, Paper No. 93, at 29-30. LSPI has appealed, arguing (among other things) that the Board should not have applied the knock-down approach and should have reconsidered the entire inquiry in light of the objective evidence. See Doc. 14 at 20-33, in *LiquidPower Specialty Prods. Inc.* v. Baker Hughes Holdings, LLC, No. 2020-2001 (Fed. Cir. Nov. 25, 2020). But the Board's decision on remand still illustrates the problem: If the decisionmaker does not even consider objective evidence until after the *prima*

facie findings are fixed, then objective evidence will often be unable to guard against slipping into hindsight and the result will be the improper invalidation of important patent rights.

The second case thus far is on the same track. The Board initially invalidated the LSPI patents at issue in that case based solely on the prima facie factors, without considering any objective evidence, and the Federal Circuit has reversed and remanded because of that evidentiary error. See LSPI II, 810 Fed. Appx. at 906-907. But the Federal Circuit rejected LSPI's argument that, on remand, the Board should use the objective evidence to reconsider "whether there was a motivation to combine, whether there was a reasonable expectation of success. whether the proposed combination is based on hindsight, and whether LSPI's invention yielded a predictable result." See id. at 906. Instead, the court limited the Board on remand to merely assessing the "weight" of the objective evidence against the conclusion the Board already reached based on its *prima facie* inquiry. *Ibid*.

LSPI respectfully submits that it should prevail on remand even under that rigid and constrained approach. But that approach is itself legally erroneous and increases the likelihood that LSPI's important patents will be improperly invalidated.

III. This Is A Good Vehicle

For the reasons set forth above, the question presented warrants this Court's review. This is also a good vehicle for answering the question. In particular, the district court's decision embodied the *prima facie* framework that many panels of the Federal Circuit have endorsed. Pet. App. 75a-76a. The lower court began by evaluating the defendants' *prima facie* obviousness case—for example finding that a skilled artisan would

have been motivated to find which ingredient used in the prior art caused an increase in LDL cholesterol. *Id.* at 76a-81a. Only after finding that defendants established *prima facie* obviousness by clear and convincing evidence did the court consider petitioners' objective evidence. *Id.* at 81a-92a. The court simply stated that each type of evidence weighed in one direction or the other, before stating the conclusion that it did not "overcome" defendants' *prima facie* showing. *Id.* at 92a.

The Federal Circuit then affirmed without opinion, see Pet. App. 1a-2a, enabling this Court to review directly the question of whether the district court's *prima facie*, knock-down approach was correct. The fact that the Federal Circuit issued no opinion also underscores the extent to which acceptance of the *prima facie* approach has become entrenched. This Court should step in to restore objective evidence to its proper role in the obviousness inquiry.

CONCLUSION

The Court should grant the petition for writ of certiorari.

Respectfully submitted,

EDWARD R. REINES WEIL, GOTSHAL & MANGES LLP 201 Redwood Shores Parkway Redwood Shores, CA 94065

ELIZABETH S. WEISWASSER COLIN F. MCGRATH WEIL, GOTSHAL & MANGES LLP 767 Fifth Avenue New York, NY 10153 ZACHARY D. TRIPP Counsel of Record WEIL, GOTSHAL & MANGES LLP 2001 M Street NW Washington, DC 20036 (202) 682-7000 zack.tripp@weil.com

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