How should a court determine whether a patent claim is invalid for obviousness? Recent Federal Circuit decisions reveal that judges answer that question principally in two different ways, and that the difference matters to the outcome of the inquiry. This article discusses the competing frameworks and considers unresolved questions.

The Frameworks

1. The scope and content of the prior art;
2. The differences between the prior art and the claimed invention;
3. The level of ordinary skill in the art;
4. Secondary considerations (objective indicia) of nonobviousness, such as commercial success, long felt but unsolved needs, and failure of others.

These factors “define the inquiry” into obviousness, as in KSR International v. Teleflex, 550 U.S. 398, 407 (2007). But Federal Circuit judges appear to disagree about how to use these factors, taking one of two approaches: prima facie and totality.

Using the prima facie approach, the court considers whether the challenger has made a convincing showing of obviousness based on factors 1-3. If so, the court then considers whether the patentee’s evidence concerning factor 4 rebuts the prima facie showing.

Using the totality approach, the court considers evidence concerning all of the factors before making any conclusion on obviousness.

Different outcomes are reached under the two approaches. In a 2012 Federal Circuit decision, In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation, 676 F.3d 1063 (Fed. Cir. 2012), the Federal Circuit reversed a bench trial verdict of obviousness judgment that used the prima facie approach. The court criticized the prima facie approach for making a “premature” finding of obviousness and for “imposing a burden-shifting framework in a context in which none exists.”

In contrast, in Merck Sharp & Dohme v. Hospira, 874 F.3d 724, 728, 731 (Fed. Cir. 2017), a 2017 Federal Circuit decision, the court affirmed the district court’s judgment that the objective evidence did not overcome a strong
prima facie case. In dissent, Judge Pauline Newman stated that the prima facie approach was an impermissible “shortcut.” In a later decision, Intercontinental Great Brands v. Kellogg North America, 869 F.3d 1336, 1345-46 (Fed. Cir. 2017), the Federal Circuit found no error where the district court considered the objective evidence after first finding that the challenger had made a strong prima facie showing. In dissent, Judge Jimmie Reyna criticized the prima facie approach for making an “intermediate” legal conclusion of obviousness before completion of “all factual analysis,” resulting in “premature findings of obviousness.”

Purpose of Objective Evidence

Objective evidence is considered to guard against hindsight bias. Shortly before Graham, Judge Billings Learned Hand explained the difficulties judges faced in deciding whether an invention was obvious to a person having ordinary skill in the art in Reiner v. I. Leon, 285 F.2d 501, 503-04 (2d Cir. 1960). In Judge Hand’s view, that inquiry required judges “to substitute their ignorance for the acquaintance with the subject of those who were familiar with it.” Nevertheless, Judge Hand explained that objective evidence offered “sign posts” that aided the inquiry.

In Graham, the Supreme Court cited Judge Hand’s opinion to explain that objective evidence was “economic and motivational rather than technical” evidence, and therefore was “more susceptible of judicial treatment.” The Supreme Court further explained that objective evidence “may also serve to guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue.”

In KSR, the Supreme Court cautioned that hindsight biases distort the analysis. Federal Circuit decisions further illuminate the distortion. In Plantronics v. Aliph, 724 F.3d 1343, 1355 (Fed. Cir. 2013), the court explained that what at first appears to be “‘common sense’ may not be so apparent in view of objective evidence of nonobviousness.” In Mintz v. Dietz & Watson, the court explained how a “breakthrough of substantial dimension when first unveiled” can be made “clear and thus ‘obvious’ to a court” after “the invention [has been] fully diagrammed” and experts have provided testimony, 679 F.3d 1372, 1378 (Fed. Cir. 2012) (quoting Uniroyal v. Rudkin-Wiley, 837 F.2d 1044, 1051 (Fed. Cir. 1988)). The court further warned that “less technologically complex” inventions were more prone to hindsight bias because “once the problem and solution appear together in the patent disclosure, the advance seems self-evident.” See also Christopher A. Cotropia, Predictability and Nonobviousness in Patent Law After KSR, 20 Mich. Telecomm. & Tech. L.R. 391, 430-33 (2014) (arguing that the post-KSR analyses can disfavor simpler technologies). Other decisions have suggested that a court may self-inflict hindsight bias by “knowing that the inventor succeeded in making the patented invention, … developing a hunch that the claimed invention was obvious, and then constructing a selective version of the facts that confirms that hunch.”

Despite the hindsight bias concern, the prima facie approach is properly used during the patent application process. Nevertheless, the burden-shifting approach in the application process requires the patent examiner to consider objective evidence before reaching a final decision, as in ACCO Brands v. Fellowes, 813 F.3d 1361, 1365-66 (Fed. Cir. 2016).

Does the Name Matter?

In his dissent in Kellogg, Judge Reyna stated that he preferred to use the term “‘objective indicia’ to properly signify their evidentiary role and prevent any misperception that they are less important than [the other factors].” Contrastingly, Chief Judge Sharon Prost stated in her dissent in Apple v. Samsung Electronics, 839 F.3d 1034, 1063 (Fed. Cir. 2016) (en banc) (Prost, C.J., dissenting), that “secondary considerations take on less importance when there is little doubt as to
obviousness.” Still other decisions use both terms, or close formulations, independently of whether they approved of the prima facie or totality approach. Compare Merck, 874 F.3d at 730 (approving prima facie approach and weighing “objective indicia” afterwards), with Stratoflex, 713 F.2d at 1538-39 (Fed. Cir. 1983) (holding prima facie approach incorrect for ignoring “secondary considerations,” despite harmless error).

Weights and Measures of Obviousness

Courts using either of the prima facie and totality approaches “weigh” the evidence of record. In Graham, the objective evidence did not “tip the scale of patentability” in favor of non-obviousness. Perhaps drawing inspiration from this “scale of patentability,” many later decisions refer to the “weight” of the objective evidence. See, e.g., Transocean Offshore Deepwater Drilling v. Maersk Drilling USA, 699 F.3d 1340, 1349, 1355 (Fed. Cir. 2012) (approving “weighing the strength of the prima facie case together with the objective evidence” to determine obviousness); Cyclobenzaprine, 676 F.3d at 1081 (under a totality approach, the failure of others “may carry significant weight in an obviousness inquiry”). In the seminal “totality” decision, Stratoflex, the Federal Circuit explained that “enroute to a conclusion on obviousness, a court must not stop until all pieces of evidence … have been fully considered and each has been given its appropriate weight.”

Returning to the issue of competing “prima facie” and “totality” approaches, Judges Reyna and Newman consider the issue of the relative weights of the factors entangled with the decision-making process. Judge Reyna’s dissent in Kellogg explained that the prima facie approach made it “difficult if not impossible for adequate weighing of evidence of objective indicia of non-obviousness.” For Reyna, the patentee’s objective evidence was “substantial” and “compelling” and should have carried the day.

Similarly, Judge Newman’s dissent in Merck explained that the Graham factors interact and that “each may affect the weight of the others.” Judge Newman stated that the prima facie analysis moves objective evidence to a rebuttal role, thus “distorting the placement and the burden of proof,” and diminishing the “critical role” of objective evidence.

Finally, the KSR Court stated that consideration of the Graham factors could “be reordered in any particular case.” To the Merck and Kellogg dissenters, this statement supported their view that the totality approach was correct. However, for the Kellogg majority, KSR requires only that objective evidence be “weighed in the overall legal determination of obviousness.”

The Way Ahead

With decisions from the Federal Circuit seemingly continuing to employ two distinct approaches, patentees and challengers litigating obviousness face uncertainty. Important questions remain, including whether the two approaches are compatible with each other and what measures adequately safeguard against hindsight bias. Furthermore, in prima facie analysis, what rebuttal weight must the objective evidence achieve? And in totality analysis, in what ways do the Graham factors affect the weight of each other?

Until the issues are resolved, even litigants who prevail on obviousness at trial should be prepared to argue their case under both approaches on appeal.

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