



## Supreme Court Rules on Obviousness

The Supreme Court recently handed down a highly anticipated decision that addresses a fundamental consideration of patent law — the criteria used by the U.S. Patent and Trademark Office and the courts to determine whether an invention is “obvious” and, therefore, not patentable. A previous article (*CEP*, Feb. 2007, p. 16) discussed the case of *KSR International Co. v. Teleflex, Inc.* Because this was a primarily mechanical patent, the application of some of the principles articulated in the decision to chemical engineering innovations is difficult to discern. However, the case does provide some broader guidance to chemical engineers.

Generally, an idea or patent claim is obvious when it is an obvious combination of elements already known in the prior art at the time of the invention. Additionally, the obviousness determination is somewhat subjective, so reasonable minds can easily disagree as to what constitutes obviousness.

Once a solution to a problem is explained in a patent application, the solution, in hindsight, can appear to be obvious. Consequently, the challenge for courts is to craft obviousness tests that preclude the use of hindsight and promote an objective and uniform standard.

One such test is called the “teaching, suggestion or motivation to combine” (or TSM) test. Under the TSM test, a combination of elements already known in the prior art at the time of the invention is obvious if the prior art itself teaches, suggests or would motivate one having ordinary skill in the art to make the combination. In *KSR*, the Supreme Court considered the validity of the TSM test — *i.e.*, whether a teaching, suggestion or motivation to combine is required to demonstrate obviousness.

The Court held that the TSM test had been too rigidly applied by the Federal Circuit, resulting in otherwise-obvious patents being held valid. The Court did say the TSM test gives “helpful insight”

into the obviousness inquiry by recognizing that a particular patent claim is not rendered obvious merely because each element in the claim can be found in the prior art. However, the Court provided other considerations that should also factor into the analysis of obviousness.

One straightforward principle articulated by the Supreme Court in *KSR* is that “when a patent simply arranges old elements with each [element] performing the same function it had been known to perform [in the prior art] and yields no more than one would expect from such an arrangement, the combination is obvious.” The most direct application of this principle to chemical engineering relates to unit operations in research and development, because advances in unit ops are more likely to combine “old elements” in such a way that each element performs as expected. This principle also relates to complex chemical compound patents, whereby certain functional groups are considered “old elements” and continue to function in the patented compound as they had functioned in prior art compounds.

In a similar statement, the Court held that “the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” This implies that evidence of unpredictable or unanticipated results of a combination of known elements can aid a finding of non-obviousness. Thus, when trying to secure a patent, demonstrating unanticipated results will be more helpful than ever in overcoming an obviousness rejection. When enforcing a patent in court, providing evidence of unanticipated results from the patented combination will make it less likely that a court will invalidate the patent on obviousness grounds.

The Supreme Court departed from existing Federal Circuit precedent, which routinely found that “obvious to try” was not a proper consideration in

the obviousness determination. Instead, it said that “where there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions ... the fact that a combination was obvious to try might show that it was obvious.” In manufacturing and industrial settings, innovation is typically driven by design needs and market pressures in the form of a constant desire for more-efficient processes and better products. Thus, chemical-engineering-related ideas and patents will be more likely to be found obvious under *KSR* principles, making it more difficult to obtain and enforce chemical engineering patents.

Under current law, patents issued by the Patent Office enjoy a “presumption of validity” when they are being enforced in court. Previously, the Federal Circuit held this presumption of validity in high esteem, stating that it “is never annihilated, destroyed, or even weakened, regardless of what facts are of record.” In the *KSR* opinion, however, the Supreme Court noted that “the rationale underlying the presumption [of validity] ... seems much diminished here.” The Court was skeptical because the prior art that it was considering was never considered by the Patent Office during its review of the patent application. In practice, defendants in patent cases routinely cite prior art that was never considered by the Patent Office. Thus, defendants will almost always be able to downplay the importance of the presumption of validity in light of the *KSR* decision. As a result, chemical engineering patents of all stripes will be more likely to be invalidated during litigation.

This “Patent Update” was written by James Gourley ([gourley@cclaw.com](mailto:gourley@cclaw.com)) and Chad Walter ([walter@cclaw.com](mailto:walter@cclaw.com)), intellectual property attorneys with the law firm Carstens & Cahoon LLP (Dallas, TX; Phone: (972) 367-2001). Gourley and Walter both have undergraduate degrees in chemical engineering and focus their legal practice on patent law.