

Patentability Standards

Early patented “widgets,” such as cigarette lighters, ball point pens or spring mouse traps, were probably far more challenging to design and develop than they were to patent. Fundamentally, patent protection is easier to obtain for a unique invention that is the first of its kind. Patentability has always required novelty and some amount of non-obviousness.

Early Guidelines

One of the earliest standards for patentability was the Flash of Genius Test (or Doctrine) in 1941. This test, which was used by the U.S. federal courts for more than a decade, held that the inventive act had to come into the mind of an inventor in a “flash of genius” and not as a result of tinkering. The simplicity of this test was that it could be applied by judges and unsophisticated jurors in any given patent dispute if the technology under consideration was beyond their scientific acumen.

The Flash of Genius Test was rejected by the Patent Act of 1952, which held that “patentability shall not be negated by the manner in which the invention was made.” The new test for obviousness was whether the invention’s subject matter and the prior art were such that the subject matter as a whole would have been obvious to a person with ordinary skill in the art at the time the invention was made.

In 1966, the Supreme Court interpreted the Patent Act of 1952 in *Graham v. John Deere*, 383 U.S. 1 and set forth the manner in which obviousness could be determined. Basic factual inquiries into the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of skill possessed by a practitioner of the relevant art were deemed appropriate. The U.S. Patent and Trademark Office (USPTO) has since instructed patent examiners to apply these “Graham factors” by:

- Determining the scope and content of the prior art;
- Ascertaining the differences between the prior art and the claims at issue;
- Resolving the level of ordinary skill in the pertinent art; and
- Evaluating evidence of secondary considerations.

The test for obviousness under *Graham v. John Deere* was modified by a federal circuit case (*Winner Int’l Royalty Corp.*

v. Wang, 202 F.3d. 1340, 1348, Fed. Cir. 2000) that held the combination of previously known elements can be considered obvious if there is a suggestion or teaching in the prior art to combine elements shown in the prior art. Therefore, the critical inquiry is whether something in the prior art suggests the desirability—and thus the obvious nature—of the combination of previously known elements. This additional test is commonly referred to as the “teaching-suggestion-motivation” (TSM) test and was formulated to prevent hindsight bias by U.S. patent examiners.

Updates and Amendments

In 2007, the Supreme Court again addressed the test for non-obviousness in *KSR International Co. v. Teleflex, Inc.* (04-1350). In *KSR*, the court rejected the TSM test as too rigid. The court endorsed a more expansive and flexible approach under which “a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.”

On October 10, 2007, in light of *KSR*, the USPTO issued guidelines for examiners to follow when determining obviousness. In addition to the *Graham* factors, the guidelines generated seven rationales for determining obviousness of a claimed invention in light of the prior art, although other rationales may be used:

- Combining prior art elements according to known methods to yield predictable results
- Simple substitution of one known element for another to obtain predictable results
- Use of a known technique to improve similar devices (methods or products) in the same way
- Applying a known technique to a known device (method or product) ready for improvement to yield predictable results
- “Obvious to try” (i.e., choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success)
- Known work in one field of endeavor prompts variations of it for use in either the same field or a different one based on design incentives or other market forces (if the variations would have been predictable to someone of ordinary skill in the art)



Michael Gzybowski is an intellectual property attorney with Brinks Hofer Gilson & Lione. He has over 25 years of experience, including serving as a patent examiner at the U.S. Patent and Trademark Office prior to entering private practice. He can be reached at mgzybowski@usebrinks.com.

- Some teaching, suggestion or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art teachings to arrive at the claimed invention (no longer the only rationale)

On September 1, 2010, the USPTO issued additional guidelines for examiners by providing examples of how obviousness was determined in 22 post-KSR federal circuit decisions. This is the present standard for patentability based on non-obviousness.

Inventing vs. Patenting

Has inventing become more difficult over the years? Some may say that today's technologies that test and develop a concept into a practical design actually make inventing easier. In addition, numerous resources—including books like *How to Invent Stuff* by Andrew Auston, Internet websites, inventors' clubs, youth inventor contests, employee incentives, etc.—promote the creative spirit and proliferation of inventions.

Although inventing seems to have become easier, patenting an invention has, in some respects, become more challenging. In some "crowded" technologies, the barrier to patentability is the number of similar prior inventions. The first patented cigarette lighter, ball point pen, spring mouse trap, etc. enjoyed the advantage of a lack of comparable prior art. In these situations, the determination of obviousness could not have been very complicated. In 2010, on the other hand, the number of utility patent applications filed increased to 478,649—but the allowance rate was only 45.6%.

When the determination of obviousness involves comparing an applicant's



proposed invention with the prior art and the amount of prior art increases dramatically, it can become challenging to find a basis for distinguishing an applicant's proposed invention from each prior art reference and any combination of the prior art references an examiner may formulate based on the KSR rationales. In his *Patently-O* blog, Dennis Crouch recently reported that from 2005-2010, the average number of references cited in issued patents rose from 23 to 39.

Crouch also reported that when KSR was cited in obviousness determinations before the Board of Patent Appeals and Interferences, examiners' obviousness rejections were affirmed 67% of the time, as opposed to an affirmation of 47% when KSR was not cited. KSR has clearly changed the manner in which obviousness is treated at the USPTO.

Future Rationales

KSR was almost five years ago. Developing case law since KSR prevents the

determination of obviousness from becoming static. Rather, case law development continues to frame and define how obviousness should be determined.

In the post-KSR era, patent practitioners can learn how to draft patent applications to avoid or limit exposure to some of the KSR rationales. Moreover, practitioners can glean from successful appellants' strategies to overcome examiners' reliance on the KSR rationales.

It is important to bear in mind that KSR did not change the concept of patentability; rather, it broadened the basis on which examiners and courts can determine a level of inventiveness that is above some threshold of what anyone can reach. If patentability was not defined by a standard somewhere beyond the capabilities of someone with ordinary skill in a given technology, patents would be meaningless—and anyone could own virtually anything without an inherent right of or entitlement to ownership. 🌐