

A Look at KSR

Wednesday, June 13, 2007 --- What is obvious? The Supreme Court has changed the test. (*KSR Int'l Co. v. Teleflex, Inc.*, April 30, 2007) Many patents that previously would have survived a validity attack will not do so now; and many applications that the PTO would have allowed may now be rejected.

Before the Supreme Court decision, the basic test applied by the PTO and the Federal Circuit was the so-called TSM test, “under which a patent claim is only proved obvious if ‘some motivation or suggestion to combine the prior art teachings’ can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art.” (Slip Op. 2).

On Monday, April 30, 2007, the Supreme Court rejected the Federal Circuit’s “rigid approach” (Slip Op., 11). According to the Supreme Court, the TSM test, at least as applied in the *KSR* case, was “contrary to Sec. 103 and [the Supreme Court’s] precedents” (Slip Op., 2). The “expansive and flexible approach” of the prior Supreme Court decisions is “inconsistent with the way the [Federal Circuit] Court of Appeals applied its TSM test here.” (Slip Op., 11).

But if TSM is too rigid, what “tests” or “inquiries” should a court and the Patent and Trademark Office pursue to decide whether a claimed invention is obvious? Consistent with its “expansive and flexible approach,” the Supreme Court did not give a simple, specific answer. But it did provide a number of guideposts, and some presumptions; and most important, a different approach.

Federal Circuit approach has given priority to protecting inventors and insuring that patents on non-obvious ideas are upheld, and to this end it has established fairly strict rules that are intended to avoid hindsight analysis.

The Supreme Court’s approach was fundamentally different, in two important ways.

First, it shifted the starting point. Rather than focusing on why patents should be granted, the Supreme Court pointed to “a principal reason for declining to allow patent for what is obvious” (Slip. Op., 12):

“[A] patent for a combination which only unites old elements with no change in their respective functions ... obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skilful men.’ *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152 (1950).” (Id.)

“Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility.” (Slip Op., 15)

Second, and most important, the Court looked at the “person of ordinary skill” in a new light. Rather than assuming that an ordinary skilled person would not create something new unless taught, suggested or motivated to do so, the Supreme Court emphasized that those of “ordinary skill” working in a field are likely to make many advances that are obvious:

“[A] person of ordinary skill in the art is also a person of ordinary creativity, not an automaton.” (Slip Op., 17).

“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” (Slip Op., 17)

“[A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” (Slip Op., 17)

In the Supreme Court’s view, none of this appears to be new, at least in the case of so-called combination patents. In a long line of decisions, starting with *Hotchkiss v. Greenwood*, 11 How. 248 (1851), and extending through *Sakrida v. AG Pro Inc.* 425 U.S. 273 (1976), the Court had consistently held that a combination of elements that, in combination, did nothing more than perform their known functions, was simply not patentable.

Graham v. Deere, 383 U.S. 1 (1966) was explicit that:

“The 1952 Act was intended to codify the judicial precedents embracing the principle long ago announced by this Court in *Hotchkiss v. Greenwood*, 11 How. 248 (1951), and that, while the clear language of Sec. 103 places emphasis on an inquiry into obviousness, the general level of innovation necessary to sustain patentability remains the same.”

KSR reiterated that:

“Neither the enactment of Sec. 103 nor the analysis in *Graham* has disturbed this Court’s earlier instructions concerning the need for caution in granting a patent based on the combination of elements found in the prior art.” (Slip Op., 11)

The pre-1952 “rule” was succinctly summarized in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*:

“The negative rule accrued from many litigations was condensed about precisely as the subject permits in *Lincoln Engineering Co. v. Stewart-Warner Corp.* 303, U.S. 545, 549: ‘The mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention.’”

And, three years after *Graham* it was repeated in *Anderson’s-Black Rock v. Pavement Co.*:

A combination of elements may result in an effect greater than the sum of the several effects taken separately. No such synergistic result is argued here. It is however, fervently argued that the combination filled a long felt want and has enjoyed commercial success. But these matters “without invention will not make patentability.” *A. & P. Tea Co. v. Supermarket Corp.*, 340 U.S. 147, 153.

In *KSR*, the Court perhaps slightly retreated from this “rigid” rule , but it was nonetheless explicit that the

“combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. Three cases decided after *Graham* illustrate the application of this doctrine.” (Slip Op., 12)

In the first, *United States v. Adams*, 383 U.S. 39 (1966), decided the same day as *Graham*, the Court found that a patent on a “wet battery” was valid: “The fact that the [individually known] elements worked together in an unexpected and fruitful manner supported the conclusion that Adams’s design was not obvious to those skilled in the art.” (Slip Op., 12)

In the other two, *Anderson’s Black Rock Inc. v Pavement Salvage Co.*, 396 U.S. 57 (1969) and *Sakrida v. AG Pro Inc.*, 425 U.S. 273 (1976), the Court found that the claimed inventions were obvious. In *Anderson’s*, the Court concluded that the two elements of the claimed combination functioned just as expected, and that “while the combination of old elements performed a useful function it added nothing to the nature and quality of the radiant-heat burner already patented,’ and the patent failed under Sec. 103.” (Slip Op., 13).

Similarly, in *Sakrida*, the “Court derived from the precedents the conclusion that when a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such a combination, the combination is obvious.” (Slip Op., 13)

“The principles underlying these cases are instructive....” (Slip Op., 13):

“[D]esign incentives and market forces can prompt variations of [a work available in one field of endeavor], either in the same field or a different one.”

“If a person of ordinary skill can implement a predictable variation, Sec. 103

likely bars its patentability.”

“[I]f a technique had been used to improve one device, and a person of ordinary skill ... would recognize that it would improve similar devices in the same way the technique is obvious unless its application is beyond his or her skill.”

“[A] court must ask whether the improvement is more than the predictable use of prior art elements according to their established function.”

The KSR decision, however, did not stop with “combination” patents. The Supreme Court recognized that the principles underlying by its prior “combination” decisions “may be more difficult to apply when more than a simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.” (Slip Op., 13-14). But it went on to give some guides as to how a court could “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” (Id.)

The Court started by recognizing that

“a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art...” [I]t can be important to identify a reason 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.” (Slip Op. 14-15).

But it followed with a caveat: “[I]t may often be the case that market demand, rather than scientific literature, will drive design trends,” and went on identify “[t]he flaws in the analysis of the Court of Appeals...” (Slip Op., 15):

In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls....One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims. (Slip Op., 16)

The Court of Appeals failed to recognize that the problem motivating the patentee may be only one of many addressed by the patent’s subject matter.... Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed. (Id)

The second error of the Court of Appeals lay in its assumption that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.... Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.... The

idea that a designer hoping to make an adjustable electronic pedal would ignore Asano because Asano was designed to solve the constant ratio problem makes little sense. (Slip Op., 16-17)

The same restricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was “obvious to try.” ...[A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp.... [T]he fact that a combination was obvious to try might show that it was obvious under Sec. 103. (Slip Op., 17)

The Court of Appeals, finally, drew the wrong conclusion from the risk of courts and patent examiners falling prey to hindsight bias.... Rigid preventative rules that deny factfinders recourse to common sense [] are neither necessary under our case law nor consonant with it.” (Slip Op., 17)

What the Court of Appeals apparently should have done was to determine whether “a person of ordinary skill in the art could have combined Asano with a pedal position sensor in a fashion encompassed by claim 4, and would have seen the benefits of doing so.” (Slip Op., 18):

There then existed a marketplace that created a strong incentive to convert mechanical pedals to electronic pedals, and the prior art taught a number of methods for achieving this advance. ... The proper question to have asked was whether a pedal designed of ordinary skill, facing the wide range of needs created by developments in the field of endeavor, would have been a benefit to upgrading Asano with a sensor.” (Slip Op., 20)

[T]he inter-action of multiple components means that changing one component often requires others to be modified as well. ...[D]esigners might have decided to design new pedals from scratch; but they also would have had reason to make pre-existing pedals work with the new engines. (Slip Op., 20-21)

For a designer starting with Asano, the question was where to attach the sensor. The consequent legal question, then, is whether a pedal designer of ordinary skill starting with Asano would have found it obvious to put the sensor on a fixed pivot point. (Slip Op., 21)

Just as it was possible to begin with the objective to upgrade Asano...., so too was it possible to take an adjustable electronic pedal like Rixon and seek an improvement that would avoid the wire-chafing problem. (Slip Op., 21)

Teleflex indirectly argues that the prior art taught away from attaching a sensor to Asano because Asano in its view is bulky, complex, and expensive. ... What [Teleflex’s] declaration does not indicate is that Asano is was somehow so flawed that there was no reason to upgrade it, or pedals like it, to be compatible with modern engines. (Slip Op. 22)

So, what remains of TSM? The Supreme Court accepted that “[t]here is no necessary inconsistency between the idea underlying the TSM test and the

Graham analysis” (Slip Op. 15). But the fundamental question is whether the claimed invention was “obvious.”

TSM, either as applied by the Federal Circuit in KSR, or in the “broader conception” that Federal Circuit “has since elaborated” (Slip. Op, 17-18), can only partially inform the inquiry. If the TSM test is satisfied, the claimed subject matter is obvious. However, TSM is only one species of the broader inquiry; under the Supreme Court’s KSR analysis, a patent claim may be obvious no matter what result the TSM test provides.

Finally, the Supreme Court adverted, briefly, to the presumption of validity and role of expert testimony:

We need not reach the question whether the failure to disclose Asano during the prosecution ... voids the presumption of validity.... We nevertheless think it appropriate to note that the rationale underlying the presumption—that the PTO, in its expertise, has approved the claim—seems much diminished here. (Slip Op., 22-23)

To the extent the court [of appeals] understood the Graham approach to exclude the possibility of summary judgment when an expert provides a conclusory affidavit addressing the question of obviousness, it misunderstood the role expert testimony plays in the analysis.

In considering summary judgment on that question, the district court can and should take into account expert testimony, which may resolve or keep open certain questions of fact. That is not the end of the issue, however. The ultimate judgment of obviousness is a legal determination. *Graham*, 383 U.S., at 17.

Where, as here, the content of the prior art, the scope of the patent claim, and the level of ordinary skill in the art are not in material dispute, and the obviousness of the claim is apparent in light of these factors, summary judgment is appropriate.

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