

Finding Synergy: How *KSR v. Teleflex* will affect Patent Prosecution in the Electrical and Mechanical Arts

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Introduction

In *KSR International Co. v. Teleflex Inc.*, the Supreme Court held that the test for obviousness used by the Federal Circuit was inconsistent with 35 U.S.C. §103 and Supreme Court precedent.² Specifically, the Court held that the Federal Circuit gave too much weight to the “teaching, suggestion and motivation” test (TSM) which requires a specific finding of some motivation, teaching, or suggestion to combine prior art teachings in the particular manner claimed before a claim may be found invalid.

In general, *KSR* will make patent claims easier to invalidate and more difficult to obtain and defend. Patent attorneys and scholars agree that the impact of this decision may be greater for electrical and mechanical cases as opposed to chemical inventions. In Part I, I give a brief overview of the *KSR v. Teleflex* case and the four errors of the Federal Circuit which were pointed out by Justice Kennedy. In Part II, I point out the preliminary responses to *KSR* in the Federal Circuit and at the USPTO. Finally, in Part III, I discuss how the case will change the world of patent prosecution, and especially the world of electrical and mechanical patent prosecution. In general, electrical and mechanical claims will likely encounter the most difficulties with obviousness rejections. However, the talented patent prosecution attorney can still get around many of these rejections, though he or she might be writing fewer new patent applications overall. This paper discusses how and why the impact will be

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² *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (U.S. 2007); 35 USC §103 states that in order to be patented, a claim must be novel and non-obvious. A claim is obvious if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

greater for electrical and mechanical cases, and how patent attorneys³ in general plan to change their patent prosecution strategies based on *KSR*. From my comparisons between the obviousness sections of the previous and newest versions of the Manual of Patent Examining and Procedure (MPEP), it is evident that finding synergy between components is one of the best ways to overcome obviousness rejections in the electrical and mechanical arts.

I. Brief Overview of *KSR v. Teleflex*

A. Facts

Teleflex was the exclusive licensee of U.S. Patent Number 6,237,565 (the Engelgau patent). This patent was directed to an adjustable vehicle pedal assembly that allows the driver to adjust the position of the pedal to provide greater driver comfort. One of the key features of the patent was the pedal's fixed pivot position, which provided greater durability for the sensor because of fewer moving parts and less potential for wire chafing. Claim 4, which was the focus of *KSR v. Teleflex*, included the requirement that the sensor be placed on a fixed pivot point. This claim was allowed despite the fact that the prior art taught a sensor on a fixed pivot point.⁴

KSR developed a separate pedal system for cars. When KSR got a contract with GMC to provide pedal systems, it added a modular sensor to the design. When Teleflex learned of this, it sued KSR for infringement of the Engelgau patent. KSR responded by asserting that claim 4 of the Engelgau patent was invalid for obviousness. The District Court agreed, granting summary judgment to KSR and holding claim 4 invalid.

³ Special thanks to David Read of Marshall, Gerstein & Borun; Noel Kaman of Brinks, Hofer, Gilson & Lione; the partners of Miller, Matthias, and Hull: Michael Hull, Thomas Miller, and Brent Matthias; and Professor Spencer Weber Waller of Loyola Chicago School of Law.

⁴ The Asano patent, which was not before the Examiner when the Engelgau patent was originally granted, taught the all-important fixed-pivot point.

The nonobviousness standard applied by the District Court was based on the *Graham* factors⁵ and on the TSM test⁶. The court, in applying the *Graham* factors, found that there was little difference between the prior art and the claimed invention, and held that the invention was an obvious combination of features already well known in the art. The court also applied the TSM test and concluded that a person having ordinary skill in the art (PHOSITA) would have been motivated to combine the prior art references based on the nature of the problem to be solved, as indicated by the teachings of the prior art and the state of the industry at the time of the invention.

On appeal, the Federal Circuit reversed, holding that the District Court had improperly applied the TSM test. The Federal Circuit held that there could be no teaching, suggestion or motivation in the prior art references unless each of the prior art references addressed the same problem the patentee was trying to solve. According to the Federal Circuit, the prior art references addressed different problems than the claimed invention and therefore could not provide the requisite suggestion or motivation. The Federal Circuit then concluded that at most claim 4 would be “obvious to try” but this would not invalidate the claim.

The Supreme Court reversed the Federal Circuit and explicitly rejected a strict application of the TSM test. The Court did not reject the TSM test completely, but rather expanded the available sources of teaching, suggestion or motivation. Examiners and courts must now also consider the interrelated teachings of multiple patents, the effects of demands known to the design community or present in the

⁵ The *Graham* factors were established by the Supreme Court in 1966 in *Graham v. Deere*. These are findings based on fact, and include: the scope of the prior art, differences between the prior art and the patent claims, and the level of ordinary skill in the art. *Graham v. John Deere of Kan. City*, 383 U.S. 1, 17-18 (U.S. 1966).

⁶ *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d. 1340, 1348 (Fed. Cir., 2000): “there must be a suggestion or teaching in the prior art to combine elements shown in the prior art in order to find a patent obvious. Thus, in general the critical inquiry is whether there is something in the prior art to suggest the desirability, and thus the obvious nature, of the combination of previously known elements.” This requirement is generally referred to as the “teaching-suggestion-motivation” (TSM) test.

marketplace, and the background knowledge of a PHOSITA. The Court stressed the importance of market demands as a source of suggestion or motivation. In real life, this means inventors are assumed to have common sense and at least a minimum of creativity when creating a new invention. Because of this, more things can be considered “obvious” in patent law terms because it is more often “obvious” to inventors to combine pieces of prior art like pieces of a puzzle.

B. The Errors of the Federal Circuit and How They Will Affect Patent Prosecution

The Supreme Court stated that the Federal Circuit made four mistakes in *KSR* and that courts should take these four issues into account in future patent infringement cases when deciding whether a claim is obvious.⁷ First, the Court held that the Federal Circuit did not fully consider the motivation arising from unsolved problems in the art that would be recognized by one of ordinary skill, but rather focused too greatly on the problem the inventor was attempting to solve. Therefore, in the future, the courts and the PTO may look beyond the problem the patentee was trying to solve to see what prior art can be used in formulating a rejection based on obviousness.⁸ Any need or problem in that field of endeavor at the time of the invention of the patent at issue can provide a reason for combining the elements in the manner claimed.⁹

The second error, which is closely tied to the first error, was in the assumption that a PHOSITA of the disputed patent will only be led to prior art designed to solve his or her actual problem.¹⁰ The Court stated that “familiar items may have obvious uses beyond their primary purposes,” analogizing an

⁷ Presentation by Abraham HersHKovitz at the APAA Conference of November 18, 2007 entitled: Obviousness following *KSR v. Teleflex* in U.S. Patent Practice

⁸ Kevin Noonan, Jeremy Noe, Daniel Williams, and Paul Kafadar, *MBHB Snippets Alert: Supreme Court Modifies Standard for Obviousness in KSR v. Teleflex*

⁹ Slip opinion: *KSR International v. Teleflex Inc.*, No. 04-1350 at 16.

¹⁰ *Id.*

obvious invention to the fitting together of pieces of a puzzle. Therefore, going forward, courts must consider whether a PHOSITA would be able to fit the teachings of multiple patents together. Third, obviousness can now be proven by showing that the combination was obvious to try. If there is a design need or market pressure to solve a problem and a finite number of possible solutions, it is obvious to one of ordinary skill to pursue the known options and arrive at the disputed invention.¹¹ Fourth, 35 U.S.C. §103 allows examiners to use common sense in examination. However, hindsight reasoning is still not okay. The Court found that the Federal Circuit had put too much emphasis on avoiding hindsight, and that this preoccupation substituted rigid preventive rules for what it termed “common sense.”

II. Preliminary Responses to KSR

A. Federal Circuit

Leapfrog is an illustration of the special problems that patent attorneys in the electrical and mechanical arts will face as a result of the changes based on *KSR*. Leapfrog sued Fisher-Price alleging that Fisher-Price’s PowerTouch Learning System infringed on its U.S. Patent No. 5,813,861.¹² Leapfrog claimed an interactive learning device employing electrical switches, memory, and a processor, to play sounds corresponding to a pressed button.¹³ The District Court found that the ‘861 patent was obvious in light of the prior art.¹⁴ The prior art was Bevan, an interactive learning device employing a motor and a record to play sounds corresponding to a pressed button.¹⁵ Bevan had no electronic components.

¹¹ *Id.*

¹² *Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1158 (Fed. Cir. 2007)

¹³ *Id.*

¹⁴ *Id.* at 1159.

¹⁵ *Id.*

Texas Instruments' Super Speak and Read (SSR) was also prior art and was a different type of learning device employing electronic components.¹⁶

The Federal Circuit affirmed the finding of obviousness and said that “the combination is thus the adaptation of an old idea or invention using newer technology that is commonly available and understood in the art.”¹⁷ There was no evidence that updating the Bevan device with electronics components known in the art was “uniquely challenging” or difficult for one of ordinary skill in the art.”¹⁸ Since electrical and mechanical patents often involve combinations of subsystems or other components, this case will have special impact on patent attorneys in those areas. Prior to *KSR*, the Federal Circuit might have found the invention to be nonobvious if it could be proven there was not sufficient motivation to add electronics to the learning device. Today, proof of not “passing” the TSM test is not enough to prove an invention nonobvious.

B. USPTO

First, the USPTO issued a Preliminary Response to *KSR* on May 3, 2007.¹⁹ In this response, the Office advised patent examiners to continue applying the TSM test, and providing a reason why a PHOSITA would have combined the prior art elements in the manner claimed. The Office advised that examiners look at three things: 1.) interrelated teachings of multiple patents, 2.) the effects of marketplace demands, and 3.) the background knowledge possessed by a PHOSITA. These three things should all be taken into account to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent application being examined.

¹⁶ *Id.*

¹⁷ *Id.* at 1162.

¹⁸ *Id.*

¹⁹ *KSR and its Progeny: Not So Patently Obvious*, presented at the AIPLA Annual Meeting, October 16-17, 2007, by Hung H. Bui of Stein, McEwen & Bui LLP

Second, the USPTO applied *KSR* principles to judgments in patent appeals cases. In *Ex Parte Catan*, the claim at issue was for bioauthentication in a consumer electronics device used to authorize credit purchases to sub-credit accounts over a network link.²⁰ The BPAI found that it was obvious to combine bioauthentication with password and account access.²¹ *KSR* was not an important factor in *Ex Parte Catan*, since express motivation to combine was already found in the prior art of Dethloff and Harada. However, the case still has implications for electrical and mechanical arts since such patents often involve combinations of subsystems.

Finally, the USPTO published Guidelines Regarding *KSR* on October 10, 2007. These Guidelines told examiners and patent attorneys what changes would be made to patent prosecution. Numerous changes and reaffirmations were listed. First, the USPTO affirmed that the *Graham* analysis was still required. Furthermore, objective evidence of non-obviousness must be considered by the USPTO, including commercial success, long felt but unresolved needs, failure of others, and unexpected results. In view of the guidance provided by the Supreme Court in *Graham* and *KSR*, the examiner must continue to articulate a reason or rationale to support an obviousness rejection under 35 U.S.C. §103. In formulating such a rejection, the rationale should be based on the state of the art and not on impermissible hindsight. The examiner should expect that a PHOSITA will exercise ordinary creativity, common sense, and logic.

The Guidelines also reaffirmed that examiners must articulate findings of fact that support the rationale relied upon in an obviousness rejection. The TSM test can be used as a basis for making an obviousness rejection, but examiners should not conclude that an invention is unobvious simply because a rejection based on TSM cannot be made (i.e., TSM is not the only test). The USPTO suggested seven

²⁰ *Ex Parte Carolyn Ramsey Catan*, Appeal 2007-0820 at 2.

²¹ The BPAI found motivation to use bioauthentication in place of PINs.

rationales for arriving at a conclusion based on obviousness. Theoretically, one of these rationales should be spelled out in rejections based on obviousness.

In speaking with various patent attorneys, it is evident that the examiners have not been following these Guidelines very carefully. Specifically, we have never seen them fully articulate their findings, nor have they articulated any of the seven rationales. This issue will be discussed further in Part III.

III: How Will Patent Prosecution Change in the Electrical and Mechanical Arts?

A. Patent Prosecution in General

The USPTO will challenge more patents based on obviousness. The USPTO has also changed the MPEP in light of *KSR*. However, some things, such as the *Graham* factors and the requirement that examiners articulate the reasons for their rejections, have not changed. Patent prosecutors need to adapt to the changes while continuing to push examiners to follow the *Graham* factors and to articulate their rationales for rejection.

In *KSR*, the Supreme Court raised the bar as to what constitutes sufficient “innovation.” The Court’s analysis would exclude from patentability inventions that are combinations of previously-known elements unless there is some evidence that the desirability of the combination would not be evident to the ordinarily skilled (and, now, ordinarily creative) person. Because of the above, most agree that there will be more patent rejections. The examiners will be more aggressive in citing old Supreme Court 103 cases to support obviousness, especially in these areas: 1.) combining old elements to obtain predictable results, 2.) substituting old known elements to obtain predictable results, and 3.) using old techniques to

obtain predictable results.²² In addition, most feel that “common sense” may be seen as enough reason to find something “obvious to try.”

There have also been significant changes in the MPEP. The MPEP is the Bible of patent examiners, and is used by patent prosecution attorneys when deciding how to traverse various examiner rejections. Two changes in particular have vast potential to change how we do patent prosecution: Section 2142 (looking at all elements of a rejected claim) and Section 2141(analogous art).

Prior to *KSR*, MPEP §2142 listed three criteria for establishing a *prima facie* case of obviousness: 1.) a suggestion or motivation in the prior art to modify or combine references, 2.) a reasonable expectation of success, and 3.) the prior art references must teach or suggest all the claim limitations. Based on the three criteria above, patent prosecution attorneys often argued one of two things: 1.) the examiner left out one or more claim limitations in his or her analysis, or 2.) the combinations proposed by the examiner would require a redesign of the base reference.²³

However, the new MPEP that does not state these criteria. Most importantly, it is unclear whether the second criterion (prior art must teach all claim limitations) is included in the new MPEP in any form. Unfortunately, for patent prosecutors, this was often the main criterion used when overcoming obviousness rejections. Some think that, after *KSR*, prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. Therefore, the thinking goes, the prior art references no longer need to teach or suggest all the claim limitations.²⁴ However, the examiners still must explain why the differences between the prior art and the claimed

²² *KSR and its Progeny: Not so Patently Obvious*, presented at the AIPLA Annual Meeting, October 16-17, 2007 by Hung H. Bui of Stein, McEwen & Bui LLP

²³ From my discussions with patent prosecution attorneys and my own office action responses.

²⁴ TC3600 Business Methods, “Determining Obviousness under 35 USC 103 in view of *KSR International Co. v. Teleflex*,” January 2008

invention would have been obvious to a PHOSITA. Practitioners, then, can argue that examiners have not explained their rationale sufficiently, or they can argue that the examiner did not sufficiently define “one of ordinary skill in the art.”

As reiterated by the Supreme Court in *KSR*, obviousness is still a question of law based on the *Graham* factual inquiries mentioned in Part I. Examiners still need to determine the scope of the prior art, but now they can look for art that solves a different problem than that which the applicant was trying to solve. When ascertaining differences between the claimed invention and the prior art, the examiner must still consider the invention and the prior art as a whole.²⁵ In resolving the level of ordinary skill in the art, it is assumed that a PHOSITA is capable of fitting teachings from multiple areas together “like pieces of a puzzle.” Furthermore, examiners may rely on their own technical expertise to describe the knowledge and skills of a PHOSITA.²⁶ If, after going through the *Graham* factors, the examiner concludes that the TSM test is still applicable, he may make a rejection based on the TSM test. However, he is supposedly supposed to articulate one of the seven rationales in his rejection.²⁷ Since examiners rarely do this, patent prosecution attorneys should push examiners to state their analysis of the *Graham* factors and state an overall rationale for rejection.

Despite these new challenges facing patent prosecution attorneys, there is a lot they can do to overcome obviousness rejections. First, it is often possible to leverage the interdependency of claim

²⁵ MPEP §2141.02 is unchanged between Rev. 5 and Rev. 6.

²⁶ TC3600 – Business Methods: “Determining Obviousness under 35 USC 103 in view of *KSR International Co. v. Teleflex*,” January 2008

²⁷ MPEP §2141(III) Rationales: A.) Combining Prior Art Elements According to Known Methods, B.) Simple Substitution of One Known Element for Another, C.) Use of Known Technique to Improve Similar Art in Same Way, D.) Applying Known Technique to Known Art Ready for Improvement, E.) Obvious to Try Among a Finite Number of Identified Solutions, F.) Design Incentives or Market Forces Prompting Variations, G.) Teaching, Suggestion or Motivation to Combine

elements (especially in method claims) to identify elements not found in the prior art.²⁸ This can be accomplished by looking at the big picture and deciding what is not accomplished by the prior art taken together. Practitioners should argue on a common-sense level about differences between the prior art and the claimed invention. In light of *KSR*, practitioners will have better success if they highlight any instances of “teaching away” and unpredictable results.²⁹

In addition, practitioners need to watch out for conclusory statements by examiners. The new Guidelines released in October 2007, require that Examiners state their rationale for an obviousness rejection. While examiners were always supposed to be clear in their rejections, the Court in *KSR* has reinforced this requirement.³⁰

There are other ways practitioners can overcome obviousness rejections. Some of these methods were commonly used before *KSR*, whereas some are most helpful in light of the *KSR* changes. Word definitions have always been important, so practitioners should continue to argue about definitions of words in their claims and the prior art. In light of *KSR*, practitioners should always make sure the references cited have been properly interpreted and considered for common sense conclusions and what they would teach those in the art. Predictable results and expectations of success are more important now, so if an examiner says a claim element is a predictable result based on the prior art, argue whether this is really true. Submission of test data showing unexpected results can help in this regard. Arguments about “teaching away,” impermissible hindsight, and synergistic effects can be critical in

²⁸ Kevin Noonan, Jeremy Noe, Daniel Williams, and Paul Kafadar, *MBHB Snippets Alert: Supreme Court Modifies Standard for Obviousness in KSR v. Teleflex*

²⁹ *Id.*

³⁰ Slip opinion: *KSR International v. Teleflex Inc.*, No. 04-1350 at 14, “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.”

light of *KSR*. Also, keep in mind that we can no longer make the argument that the examiner has not established a prima facie case of obviousness.³¹

In general, the patent prosecutor's job is to: 1.) write the patent application that emphasizes all the differences between the invention and the prior art (preferably not in the summary); 2.) highlight benefits of those differences (make a sales pitch to the examiner); and 3.) prove the nonobviousness of the claims to the examiner by arguing why the examiner's reasons for rejection are not adequate.³² Unfortunately, after *KSR*, we can no longer assume the examiner is using any one methodology in arriving at his rejection, and we cannot use any clear set of strategies for overcoming obviousness rejections. Furthermore, in the electrical and mechanical arts, we will have problems with very broad inclusion of analogous art, and with the bias against patents for incremental improvements.

B. Special issues in electrical and mechanical patent prosecution

Electrical and mechanical claims will likely encounter the most difficulty with obviousness rejections due to their tendency to make use of components that have a finite number of functions. Obtaining patents will be hardest in technologies where incremental combination patents are more prevalent. In addition, "predictable" arts such as electrical and mechanical arts, may be affected more than "unpredictable" arts. For example, a combination of electrical circuits or mechanical structures each performing the same function they had been known to perform and without any synergistic results due to the combination will be rejected as obvious more readily.³³ The best way to overcome this, from a patent prosecutor's perspective, is to write a written description directed toward one of lower skill. In

³¹ 37 CFR 1.111(b) – "...The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references... A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section."

³² Michael Hull

³³ There is synergy if the final effect is greater than the sum of the effects of the components taken separately.

general, patentees will want the level of ordinary skill to be low, so that fewer things are considered predictable.

Most striking to me was the change to MPEP §2141 II. Previously, in Revision 5, there was a statement to the effect that the finding of a synergistic result does not supersede findings of obviousness (or nonobviousness) based on the Graham test. However, in Revision 6, this statement is removed. In my estimation, this implies that synergistic results are more in the forefront now and can be used even in instances when a patent would be obvious just based upon the *Graham* factors. Synergistic results are especially important in electrical and mechanical arts which are combining prior known art. If there is no synergy, this is one thing the Examiner can pick apart in rejecting the claim for obviousness. Conversely, pointing to synergy is a way to overcome obviousness rejections.

Another problem arises for patent prosecutors with the analogous art requirement of §2141.01(a). Prior to *KSR*, the examiner was to look for references in the “field of the applicant’s endeavor” or “reasonably pertinent to the particular problem with which the inventor was concerned.”³⁴ After *KSR*, the test for analogous art is much broader. Now, “a reference in a field different from that of the applicant’s endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his or her invention as a whole.”³⁵ This has been changed based on wording from *KSR* itself: “Under the correct analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.”³⁶ This particular wording will probably have the most effect on the electrical and mechanical arts. Any electrical or mechanical art could be analogous art for any other electrical or mechanical art. It is not the same as

³⁴ In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992).

³⁵ MPEP §2141.01(a) Analogous and Nonanalogous Art”

³⁶ *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

biotechnology in that there are distinct areas of biotech that are pretty much insulated from other areas. An electrical circuit could be used in any range of applications, unlike a chemical compound for treatment of different ailments. The best way to overcome this is to look for unpredictable results and synergy.

Conclusion

In general, *KSR* will make patent claims easier to invalidate and more difficult to obtain and defend. The USPTO will challenge more patents based on obviousness. The USPTO has also changed its basic operating procedures in light of *KSR*. However, some things have not changed. Patent prosecutors need to adapt to the changes while continuing to push examiners to follow the requirements that have not changed.

Despite the new challenges facing patent prosecution attorneys, there is a lot they can do to overcome obviousness rejections. Practitioners will need to argue on a common-sense level about the differences between the prior art and the claimed invention. Practitioners will have the most success in this area if they highlight instances of “teaching away” and “unpredictable results.” In addition, practitioners need to watch out for conclusory statements by examiners. In the past, examiners have been notorious for conclusory statements and recent rejections show that they are using *KSR* as a trump card to become even more conclusory in their rejections.

There are other ways practitioners can overcome obviousness rejections. Some of these methods were commonly used before *KSR*, whereas some are most helpful in light of the *KSR* changes. Unfortunately, after *KSR*, we can no longer assume the examiner is using any one methodology in arriving at his rejection, and we cannot use any clear set of strategies for overcoming obviousness rejections. Furthermore, in the electrical and mechanical arts, we will have problems with very broad inclusion of analogous art, and with the bias against patents for incremental improvements. Electrical and mechanical claims will also likely encounter the most difficulty with obviousness rejections due to

their tendency to make use of components that have a finite number of functions. In general, patentees will want the level of ordinary skill to be low, so that fewer things are considered predictable. Another problem arises for patent prosecutors with the new analogous art requirement. After *KSR*, the test for analogous art is much broader.

Patent attorneys and scholars agree that the impact of *KSR* may be greater for electrical and mechanical cases as opposed to chemical and biotechnological inventions. Since electrical and mechanical arts are considered more predictable, patents claiming combinations of electrical and mechanical structures will suffer more obviousness rejections if there is no synergy among the elements. Furthermore, the new analogous art requirement is broader and this affects electrical and mechanical patents more than other patents. Patent attorneys can best traverse these objections by looking for unpredictable results and synergy.