

United States

How best to get a result at the US Patent and Trademark Office post-*KSR*

Patent applicants face many challenges in the current environment. Changes to examination practices introduced since *KSR v Teleflex* (550 US 398, 2007) and the increasing load on examiners have made it more difficult to get patent applications allowed. However, the authors of this chapter do not believe that *KSR* has altered the prosecution picture as much as some commentators would have us believe. The obviousness analysis today is very similar to that which existed in the mid-to-late 1980s.

Responses to office actions have become longer and the number of office actions before allowance has risen. At the same time, patent seekers want to lower costs and acquire their patents more quickly. What is a patent applicant to do? This chapter suggests some strategies that may help.

The obviousness/non-obviousness battle Background

Title 35 of the US Code, Section 102 establishes that the claims of a patent application are not allowable if a single reference teaches or anticipates all of the claim's elements. However, under Section 103, absence of anticipation is necessary but not sufficient for patentability. It is also necessary that the differences between the subject matter of the patent claim and the prior art be such that the subject matter as a whole would not have been obvious at the time the invention was made to a person with ordinary skill in the art to which the subject matter pertains.

When adopted in 1952, Section 103 was intended to be an objective test for patentability that would circumvent the abuses of subjective standards which applied for a century before the statute. It had been common, for example, for courts to require that a claimed structure rise to the 'level of invention' or have been conceived in a 'flash of genius'. The Supreme Court provided a more certain, objective basis for determining patentability under Section 103 in *Graham v John Deere* (282 US 1, 148 USPQ 459, 1966).

Under *Graham*, the US Patent and Trademark Office (USPTO) or a court makes a determination of obviousness/non-obviousness based on evidence in the record. The inquiries under *Graham* include the scope and content of the prior art, differences between the prior art and claims at issue, and the level of ordinary skill in the pertinent art. Secondary considerations include commercial success, long-felt but unsatisfied needs and the failure of others. The obviousness determination must include a consideration of the invention as a whole, including its structure, its properties and the problem it solves. The non-obviousness of the claim's structure for its intended purpose is also relevant (*In re Wright*, 848 F 2d 1216, 6 USPQ 2d 1959 Fed Cir (1988)).

The Court of Appeals for the Federal Circuit began to use a teaching-suggestion-motivation test to decide questions of obviousness and, in particular, to quell inclinations towards hindsight analysis by both patent examiners and the courts. In *KSR*, the Supreme Court held that the teaching-suggestion-motivation test was being applied too rigidly and that while it can help to avoid impermissible hindsight analysis, it is only one factor of the obviousness analysis. The rationales for examination that came out of *KSR* have become part of the Manual of Patent Examination Procedure as of Revision 6, 2007, Sections 2141-43, "Examination Guidelines for Determining Obviousness". The details of the rationales and the factual findings supporting them exceed the scope of this chapter, but applicants can use them effectively before and during prosecution of their application.

Recommendations regarding non-obviousness

Generally, acquiring reasonable claim scope and therefore effective patent coverage has become a process of overcoming §35 USC 103 rejections. With the application of *KSR* and the growing workload of patent examiners, this process has become longer and more time intensive, which in turn has raised the cost of

acquiring a patent. This does not mean that companies should file for fewer patents; they just need to address proactively these issues prior to filing by managing the patenting process or by adjusting the specification.

Many inventions are reviewed before the decision to file is taken. If no such process exists, it is recommended that one be added, even if it is just a conversation between the technical manager and the patent counsel. The prioritisation of invention disclosures generally involves determining whether any upcoming deadlines exist, such as product releases or presentations, and the overall importance of the invention to the business.

Another factor to consider involves the timing of the patent application, not with regard to deadlines but with regard to the invention's maturity, and any facts or experimental data available to bolster non-obviousness arguments. While an applicant does not want to wait too long to file an application, there are advantages to waiting until more facts or experimental data becomes available.

Under the different rationales set out in *KSR*, the examiner must make findings that support the rationale used to reject the claims under Section 103. Many of these findings rely upon a person of ordinary skill in the art combining elements that would result in a predictable outcome, substitution, improvement or variation, or have reasonable expectations of success. By providing facts and experimental data related to both successful and unsuccessful combinations, applicants can load their specification with information that can overcome these arguments. Delaying filing until such information becomes available may greatly assist the eventual prosecution.

However, long delays should be avoided because of the possibility that others might publish or patent intervening prior art. This risk can be reduced in the United States by filing a provisional patent application and following this with a US or international application within a year. The intervening year can be used to develop additional information and experimental data that might help the application to overcome rejections of obviousness.

Once the decision to file is made, the patent application can be drafted with an eye towards non-obviousness. Many applications begin with a section on the field of the invention. This, along with the claim's preambles, can be used to define the art to which the invention pertains for purposes of obviousness. Its framing is particularly important in multi-disciplinary inventions and can establish who is the person of ordinary skill against whose knowledge the obviousness analysis is performed.

Another part of the application sets out the invention's background. This usually includes a discussion of pertinent patents and publications which are known to the inventor or which have been discovered during a patentability search. The discussion of these references can anticipate questions concerning the scope and content of the art and illustrate why certain patents are not within the scope of the art or teach contrary to the invention.

Under *KSR*, any need or problem known in the field of the endeavour (the definition of which appears to have expanded in the years since *KSR*) at the time of the invention can provide a reason for combining the elements as claimed. Applicants can proactively address these issues by demonstrating, even if just in general terms, how other solutions have been unsuccessful, would not apply to the current situation or would do more harm than good. Researchers and inventors will generally provide the best information as to other solutions available. Ensuring that either the invention disclosure form or the inventor interview asks those types of question will make this information available to the application drafter.

It is impossible to predict what the examiner will rely upon as relevant prior art in an obviousness rejection. If the inventor is aware of some relevant references, a pre-emptive strike may prove useful. This could raise these references and then demonstrate how they would not solve the problem, either alone or in combination with other references. In order to provide this type of argument, inventors and drafters must work with some sort of policy, plan or guide that encourages the disclosure and analysis of this information.

Care must be taken to avoid attributing the inventors' own inventive insights to the prior art – an inventor may understand why the prior art is deficient while those skilled in the art might merely know the symptoms of the problem. Recognising the real source of a problem can be a significant aspect of the invention, from which the solution becomes self-evident.

In summary, patent applicants should consider the timing of the patent application to allow information about the invention's effectiveness, success or advantages to be included. Applicants should also consider writing the application proactively, defining the field of invention and the scope and content of the prior art, and demonstrating why other solutions to a same or similar problem do not work.

During prosecution

The analysis of and response to detailed rationales are best left to patent practitioners. However, managers and

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executives involved in the patent process can contribute to a more effective prosecution by ensuring that inventors or other technical experts are available and involved in the patent process alongside patent practitioners. This provides counsel with an invaluable resource in:

- defining a person of ordinary skill in the art;
- determining when references combined by the examiner teach away from each other; and
- directing amendments to claims to distinguish from the prior art.

Involving inventors in the process can save time and money, and can help to focus the discussion on deficiencies and failures of the prior art and on amendments that clarify without unduly limiting the claims.

Applicants should encourage phone calls with the examiner, preferably involving the inventor. As discussed below, the USPTO's workload continues to increase. Providing an opportunity for the inventor or other technical expert to help the examiner grapple with the technology underlying the invention and the differences between it and the prior art can help to overcome many obviousness rejections.

Upon receiving the first office action, applicants should do some planning with counsel, either directly or through the inventor. Once they have a feeling for the lie of the land, it becomes possible to formulate a strategy that will result in the best patent claim coverage in a cost-effective and timely manner, while addressing the elements of the obviousness rejection.

In summary, applicants should stay involved and make resources available to patent practitioners that will assist them in getting the claims to allowance, even in light of the current state of obviousness rejections.

USPTO's workload

As mentioned above, the number of patent applications filed continues to increase; according to the USPTO, it has risen from 243,063 in 1998 to 456,321 in 2008 (“US Patent Statistics, Calendar Years 1963–2008”, www.uspto.gov). However, the number of utility patents, granted has fallen off from 162,509 utility patents issued in 2006 to 154,699 in 2008 (“Performance and Accountability Report Fiscal Year 2008, Table 1: Summary of Patent Examining Activities”, www.uspto.gov).

Meanwhile, the pendency time for applications has risen from 27.6 months in fiscal year 2004 to 32.2 months in fiscal year 2008. In addition, there seems to have been an increase in the number of restriction requirements prior to examination.

In this environment, how is it possible to get an application issued in a timely manner?

Applicants should consider making smaller (though not necessarily narrower) claims sets. The claims themselves can be as broad as desired, as long as they are not so broad as to be unenforceable. The broadest claim should be ‘barely novel’ (ie, distinguishable on the face from the closest prior art). The case should also include one or more claims that are clearly distinguishable from the prior art, even under an obviousness analysis. Do not waste time and money on claims that merely add features known in the prior art, unless such claims also include subject matter pertinent to the invention (ie, specifics of cooperation between the old and the new). Many US examiners will identify dependent claims that are patentable even while rejecting broader claims, which can shorten time to an allowance.

One of the rationales supporting a restriction requirement lies in the burden on the examiner if restriction is not required (Manual of Patent Examination

Procedure, Section 808). This seems anecdotally to result in more frequent restriction requirements than previously, which the authors attribute in part to overloaded patent examiners. The overload arises not merely from the sheer number of applications and the ever-growing body of prior art, but also from the time it takes to perform the detailed analysis required under *KSR*. The average length of office actions seems to be rising, taking more of examiners' time to research and prepare.

A smaller claim set would focus on one aspect or mode of the invention. For example, one mode of the invention may be an apparatus, while another might be a method. Patent examiners often issue restriction requirements between apparatus and method claims (contrary to Patent Cooperation Treaty, European Patent Office and Japanese Patent Office practice). The authors have found that proactively filing these in separate US applications with the same or very similar specifications results in faster prosecution. Whether this is as a result of fewer independent claims or because the smaller claim sets focus the examiner's efforts more directly is unknown.

Looming in the shadows are new patent rules that would involve limitations on related cases (*Tafas v Doll*, Fed Circ 2009). However, until those rules come into effect smaller claim sets in two or more cases may be more effective. For managers and executives involved in the patent process, this may initially seem more costly. However, filing multiple cases proactively or filing them

in series in response to restriction requirements results in approximately the same costs, and the first approach will be faster.

As discussed earlier, including supporting facts and data in the specification seems to smooth the way over obviousness rejections. The authors have found that receiving an obviousness rejection and then countering with results contained in the application specification (eg, an unexpected advantage) has a fairly good track record in overcoming rejections. Similarly, if an examiner cites a reference discussed in an application, a practitioner can point to that reference and discuss why it does not apply in the specification with generally positive results.

Finally, applicants should encourage, if not require, their practitioners to call the examiners. Having the examiner's undivided attention, even if only for half an hour, can gain significant ground in the application's progress. In addition, the examiner's comments may contain guidance, which can result in more focused amendments that progress the case even further.

In summary, many of the recommendations with regard to accommodating the patent examination overload are similar to those used to deal with obviousness rejections, with the addition of considering smaller claim sets.

In the authors' experience, these strategies can result in more effective patent prosecution at the USPTO, leading to more patents with a good claim scope that are issued in a timely manner.



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