

A Framework for Identifying Inventions Worth Patenting

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The selection of an invention for patenting must be based on the business goals and needs of the client. This mandates that the prosecutor take the time to understand the patentee's business, and not merely its technology—the mere technical 'coolness' of an invention is not a sufficient reason for patenting it.

The patentee's business is typically focused around some number of markets or market segments. Identification of these markets is necessary to determine who are likely competitors, and what are types of products or services they offer. This informs how to structure different claims for products, systems, or "components," to better ensure infringement by different parties.

Next, in each of these markets, identify the competitive advantages on which the patentee seeks to capitalize. The competitive advantages may be in specific product features or functionality, technology independent product or service architecture, a service offering, or in satisfying particular customer requirements (*e.g.*, security, fault tolerance, real time updates, etc.). It is these competitive advantages that the patent portfolio must as a whole seek to protect. Since it is unlikely that any one patent will protect all of the company's competitive advantages, the strategy is to develop a 'minefield' of patents that must be negotiated by the competition in order to effectively compete.

With the competitive advantages so identified, the next step is to identify which technologies support each competitive advantage. In some instances the competitive advantage will be created by a technical achievement; in others multiple different technical features will cooperatively provide this support. Each of these technical features, or their relevant combinations is then evaluated for the threshold requirements of novelty and non-obviousness. Satisfying these patentability requirements is a necessary but not sufficient condition for filing a patent application. That question is answered by evaluating a number of "strategic value considerations."

- Does the invention have longevity? An invention has to be useful not just today, but for at least 5-9 years, time enough for a patent to issue and be either lucratively licensed or enforced against infringers.
- Are others likely to infringe? A primary solution to a major technical problem, may provide a powerful blocking patent, whereas a "one of many" solution generally adds value in a portfolio built around a product or technology infrastructure. Even if the invention is not itself a candidate for a blocking patent, consider whether it can, together with a number of other patents form a sufficient "mine field" of protection around the patentee's business space. This approach is commonly used in patent licensing pools that cluster around a technology standard. Further, patents on second and third best solutions, even if they are not going to be in the patentee's own products, can form effective barriers to entry by increasing the cost to others to design around.
- Can infringement be cost effectively detected, particularly before litigation? Duplication of "customer facing" technology or features (*e.g.*, end user products or services, user interface features, business methods) is easier to detect and confirm infringement. This increases the likelihood of efficient enforcement and reduces the costs associated with convincing an infringer to cease or take a license. Patents on internal technical architectures, such as chip structures, internal data processing algorithms, and other "below the surface" features are more costly difficult to enforce, as they often require access to a competitor's engineering documentation, source code or other trade secret material. In addition, patents on these types of inventions often do not directly target eCommerce competitors who integrate software and systems from other vendors to create their eCommerce business. Better are the high level "service offering" patents that describe the functional aspects of the patentee's services or products, independent of specific technical architecture of implementation.

- Are there valuable licensing or business opportunities provided by the patent? Licenses to competitors may create value for the patentee, either through direct revenue, or often more importantly, through a cross license to the competitors' patents, thereby providing a greater scope of design freedom. Patents on technical infrastructure often provide licensing opportunities to non-competitors outside of the patentee's primary business space. This creates a source of additional return on the investment without giving up the competitive advantages provided by the patent in the patentee's markets. In some instances, patents may serve as the core of a new business opportunity that can be spun out of the company. These opportunities should be addressed as well.
- What patents are the company's competitors obtaining? Competitive intelligence is another important part of the invention selection process. While U.S. patent applications can be confidential for at least 18 months, regular searches on issued patents, published U.S. and international applications provides significant information. If a competitor is filing aggressively in a particular technology area, that should increase the value of inventions by the company in that same area. This ensures some patent assets to form the basis of a defensive cross license if needed in the future. In particular, when the company's engineers find out what patents their competitors are getting, it often yields a competitive atmosphere and more invention disclosures.

These various criteria can be differently weighted according to the patentee's business needs. For example, each criteria can be rated on a scale of 1 to 5, and the total scores added; inventions with scores over some threshold (typically tied to an available budget) are selected for patenting. More common is simply using this information to make an overall informed judgment about whether an invention is worthy of patenting.

The final consideration is the patentee's available budget. Clearly, all patentees should patent the inventions that score highly on the foregoing considerations, that are the "crown jewels" of the company's technology. For patentees with high legal budgets, there is greater flexibility, particularly in patenting inventions that are merely second best

solutions or portfolio builders. Yet even for those with modest legal budgets, serious consideration should be given to the "mine field" approach. This is because most patentees will very rarely come up with a formidable competition-stopping pioneering patent. Most will likely develop incremental advances in their field with the occasional "key feature" invention that is important to the company's product, but that is not essential to the competition. A portfolio then of "key feature" patents works as a whole to increase the costs to competitors for doing business, which itself becomes a competitive advantage to the patentee.

Selecting inventions to patent is not a science—its every bit as complex and strategic as selecting which products or services to bring to market. Insight into the industry, a strong sense of business strategy, economics, and a bit of luck all play a part. Close collaboration between patent counsel and the client leverages the client's own business expertise and knowledge of the industry and competitive position with patent counsel's understanding of how to best position patents for successful prosecution, licensing, and litigation.

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