Why IP currency is the route to profit expansion

Peter Spours and **Dan McCurdy** explain why treating your patents like currency and researching competitors' portfolios can help you build a successful IP strategy

Billions of dollars are spent on research and development by leading technology companies, and additional tens of millions of dollars on securing patents. Too often, these investments do little to provide the essential freedom to make and sell products. High technology companies need to ask: "Can our IP investments provide the ammunition we need to counter patent attacks from others as we move into new markets and secure revenue from those who use our inventions?" If not, it is likely their problems began with the lack of alignment of their patent portfolio with their business objectives.

Freedom of action must be the starting point

Traditionally, the primary objective in securing patents has been to prevent competitors from freely copying inventions that provide competitive advantage. However, preventing piracy reflects only a portion of the expected return on a patent portfolio. For a company to grow, it needs freedom of action. This is the ability to sell products or services in a chosen market, knowing that if patent infringement allegations are made, its own patent arsenal will be sufficient to obtain an equitable resolution and preserve the right to pursue corporate aspirations.

Business freedom is not found without formulating and implementing a decisive freedom of action plan. IP professionals need to be able to anticipate the business needs and deliver the required portfolio. Alignment of business objectives and patent strategy is essential. Patent filing programmes that simply reflect R&D programmes will rarely fully match future business needs. This is not to say that the R&D is wrongly focused, but rather that the patents emerging from R&D work may not, alone, provide the full arsenal needed to counter patent attacks from others.

Therefore, what is needed is a corporate strategy that fully integrates the IP strategy required to achieve it. Once the corporate strategy is well understood by the IP team, that team can identify the patent requirement to allow the business to flourish. Then, the question is whether to organically develop patents, buy them or both.

Patents and other forms of IP, in this context, are best viewed as a currency for use in achieving vital corporate results. For example, they can be used to defend patent threats or as leverage in lowering supply chain costs. Both cases involve the grant of licences in exchange for a monetary settlement, a supply discount or other consideration. All applications of patents to business operations share a common requirement; the owner of a patent portfolio must clearly understand the impact of its patent on *the products and services of others*, as well as the impact of others' patents on its products and services. While this may seem intuitively obvious, very few companies have a product-centric understanding of their patent portfolio.

Most companies mistake a *technology*-centric understanding of the portfolio for a *product*-centric classification. When a product-centric approach is absent, patents may be filed will little connection to corporate strategy. Fulfilling a patent quota, or satisfying an inventor's desire for a bonus tied to patent issuance, is insufficient rationale. When threats to product marketing (freedom of action) or competitive product challenges requiring the use of infringing inventions can be anticipated, developing a patent portfolio to meet that imperative is essential. Sometimes this requirement can be met through patent filings from R&D. Other times, it must be met from acquisition of patents. With care, such acquisitions may be funded through the sale of patents that are duplicates or nolonger helpful in meeting anticipated needs.

The elusive nature of timely IP currency

So, why is the availability of IP currency to meet corporate requirements so elusive? Patent portfolios are generally developed and managed by patent attorneys who have technical skill, but a limited understanding of product markets or strategic corporate objectives because they are not exposed to these corporate needs! Similarly, a company's marketing specialists understand the company's products and services, but have very little understanding of patents, of potential patent adversaries, or the consequences of not planning a defence against future attacks from such patent aggressors.

While a technology-centric classification is one with which patent attorneys are comfortable, it bears little relationship to the very purposes for which patents are created: to protect against the unauthorized use of inventions in the products or services of others. Hence a product classification is vital because the application of patents relies on the interrelationship between inventions protected by the patents and products using those inventions. A product classification allows executives to understand the IP landscape in which their business operates and the freedoms and constraints on corporate ambition.

Companies are only able to use patents effectively when they understand their relevance and linkage with their own and rival's products. This is because the decision-making executives think and make choices based on current and future economic gain. They rarely take decisions based on technology. For these reasons, patents classified by technology provide poor information for decision makers, whereas a product-based format is an excellent strategic tool.

How to develop a product-based patent inventory

Developing a product-based patent portfolio is an arduous but essential process. The first step is to create an initial indication for each patent as to its quality and the likely impact of its claims on one or more products. Relating patents to products is not the simple task it might seem. It requires a review of each patent family and an understanding of the

leading products in the market potentially using that invention.

A project to create a product-based inventory uses an extensive product-based taxonomy or glossary for patent portfolio classification. This taxonomy is used by patent-savvy engineers to classify each patent in a portfolio to indicate each product type that an invention *could* (but not necessarily *would*) be used in. The output of this "one for many mapping" is a matrix that provides a quick view of every patent in the existing portfolio that may be used in product types, such as cellular handsets, flat panel displays, a DVD player, a laptop computer, etc.

A typical patent rating matrix

	Rating	Criteria
Technical viability factors	Detectability	Ability to detect infringement in products
	Vulnerability	Vulnerability to prior art challenges
	Avoidability	Availability of practical alternatives
	Claim analysis	Technical understanding of claims
Commercial significance factors	Standards	Impact upon industry standards
	Maturity	Impact on current vs past or future products
	Commercial usage	Believed commercial significance of the invention

The next step is to carry out a more detailed examination of the individual patents relating to the most promising product areas. These areas are generally those product types in which:

- significant revenue is generated,
- high overall market revenue growth is evident, and
- a reasonable number of relevant patents in the portfolio exist.

Finally, a quality assessment is required. Factors such as claim construction, the ability to detect infringement, avoidance or workaround of the invention are evaluated, as well as likelihood of use and validity. This is based on a technologically skilled reviewer's general knowledge of the potentially impacted product and the technology. While some applaud the virtues of complex, statistical analyses involving hundreds of criteria to assess the strength of a patent, the simple fact is that only two factors matter: is the patent infringed by products or services that generate large revenues from infringers, and is the patent valid? Almost nothing else matters

Following this classification process, each patent can be designated with a high, medium or low rating reflecting the likelihood this patent will prove vital in licensing negotiations. This will provide an indicator of those patents that have the most promise of being both high quality and having an impact on the product type.

Using the results to assess freedoms

As revenues from product sales grow, exposure to patent aggression by other patent holders increases. Given the long gestation of inventions and the time taken for patent applications to mature into patents affecting products with significant revenues, the foundation of freedom of action needs to be laid years before it is required to effectively shield companies and their product lines from aggressors. A comprehensive product-based inventory is vital in any assessment of the level of freedom a company has to enter or to grow in its market.

This product-based inventory is also vital in defence against patent assertions by others, since it permits rapid counter-assertion against the most valuable products of adversaries. No longer is there a need to explore the entire portfolio for patents with which to launch counter-assertions against aggressors. Simply identify the largest revenue-producing products or services of aggressors, find the row on the chart that matches its product or service, and immediately you have identified those patents that are most likely to apply to the products or services important to the aggressor.

It is vital to have all those involved in patenting and in patent strategy aligned to business objectives and fully understanding how patenting activities should support the corporate objectives. A product-based inventory will enable this assessment of the IP issues being faced:

- Are there any latent patent threats?
- What are the product vulnerabilities that competitors could challenge?
- How does our patent portfolio measure up in providing a sound defence against any challenges to current or anticipated products and their markets?

Freedom of action analysis should provide you with the following information:

- A detailed understanding of the products requiring defensive patent coverage, showing the elements that may become the focus of infringement allegations.
- An inventory of your patents likely to be relevant to these products.
- A measure of the technical/commercial value of these patents and their likely worth in defence and counter assertion.
- A matrix of each potential adversary's key products, enabling you to identify those patents that would be the subject of a counter-assertion.
- The identification of your own patents that would probably impact the key products or services of each potential adversary. It is not advisable to carry out an analysis of infringement, but you do need to be able to determine whether a credible threat of infringement of your patents by each potential adversary's products or services is likely.
- Once all potential attackers are identified, you need to assess how aggressive or passive each has previously been in the enforcement of its patents. Past behaviour is not necessarily an indicator of future intent.

Making freedom of action a reality

For those who pursue an IP strategy driven by R&D activity using a simple technology-based filing programme, freedom of action will remain elusive. The assurances that executives need to drive the business into new sectors and markets will be absent and dangers of patent actions will persist.

For the enlightened who align IP strategy with underlying corporate objectives and understand the relationship between their IP and their products, freedom of action is a realizable goal. Those who have researched and acted upon the relative IP strengths of competitors will be well positioned to provide their executives with the confidence to grow their business and create real shareholder value.


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