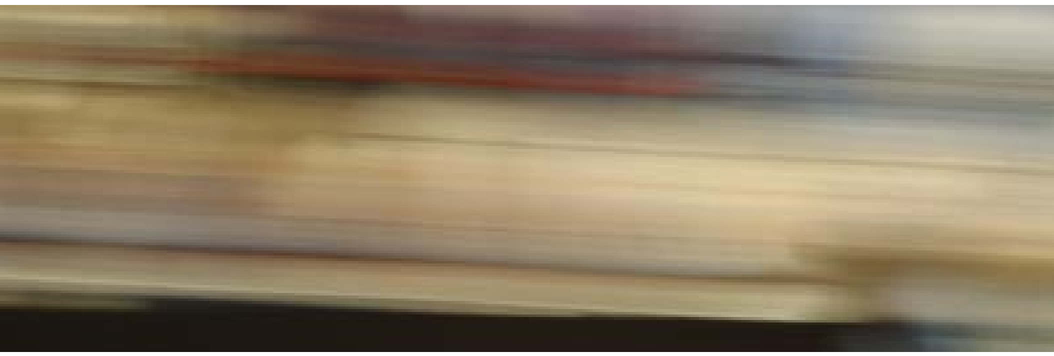


BOARDROOM INTELLIGENCE SERIES

2006

PART TWO | MANAGING RISK & RESOLVING CRISIS REVIEW

developing a comprehensive response to risk

sponsored by:

Baker & McKenzie

BDO Stoy Hayward LLP

CRA International

Ernst & Young LLP

McKenna Long & Aldridge LLP

Milliman

a financier worldwide supplement

FINANCIER WORLDWIDE corporate finance intelligence

Risk management: a focus on intellectual property

BY BJORN PETTERSEN, JEFF SNELL AND BRIAN FRIZZELL

The news is filled with stories about how intellectual property (IP) can dramatically affect company value – from patent infringement lawsuits to blockbuster drug patents expiring to small companies with little more than IP being sold for large amounts. However, while companies devote significant time and effort in the management of their physical assets, they typically devote much less time and effort managing their IP assets. This article examines the need for IP risk management and provides a framework for effective management of IP assets and related risks.

Need for IP risk management

An increasing and significant portion of company value is attributable to its IP, and these IP assets are subject to substantial risk. To demonstrate that IP is an increasing and significant portion of company value, we examined the value of intangible assets at two points in time for the 30 companies comprising the Dow Jones Industrial Average (DJIA) using a commonly used metric for estimating the value of intangible assets, the market-to-book ratio. Intangible assets include IP assets, such as patents, trademarks, copyrights, and trade secrets, as well as employee knowledge and other types of assets that do not appear on the balance sheet. Although it is difficult to measure directly, IP assets often comprise a large portion of a company's intangible assets.

In 1985 the average market-to-book ratio for companies comprising the DJIA was approximately 2.1, suggesting that intangible assets represent approximately 52 percent of company value. In 2005, the market-to-book ratio for companies comprising the DJIA was approximately 3.6, suggesting that the value of intangible assets has grown to represent approximately 72 percent of company value. This number increases to 83 percent of company value in 2005 if the book value of intangible assets is excluded from the denominator. These results indicate there is a significant and increasing need to manage the risks associated with a company's IP, which is often a large portion of intangible asset value.

These valuable IP assets are often subject to substantial risk. We examined empirical evidence of potential IP litigation risk (one component of IP risk) to evaluate the magnitude of risk associated with IP assets. According to government statistics, there were 1723 patent infringement lawsuits initiated in 1995. In 2005, this number increased to 2829, for an increase of 64 percent in just 10 years. Damages in a single IP infringement can be substantial, sometimes amounting to hundreds of millions of dollars (based on a review of awards included in published court decisions). In addition to damages, both plaintiffs and defendants typically spend millions asserting and defending IP infringement suits. In fact, the median cost of litigation for large patent cases was estimated to be $2.5m in a 2003 AIPLA survey. Other statistics from US courts show that it takes 20 months on average for a patent infringement case to reach trial, resulting in a significant period of uncertainty for the company, customers, suppliers, and shareholders. The increasing number of issued patents, the large potential damages awards, the high cost and long duration of IP litigation, and the emergence of companies that exist solely to enforce patent rights suggest that IP litigation risk is something that companies must address.

The prior discussion demonstrates that IP risk is both significant in terms of size of potential impact and in relative frequency of events. The evidence indicates a company places a substantial amount of value at risk if it does not proactively manage IP risk.

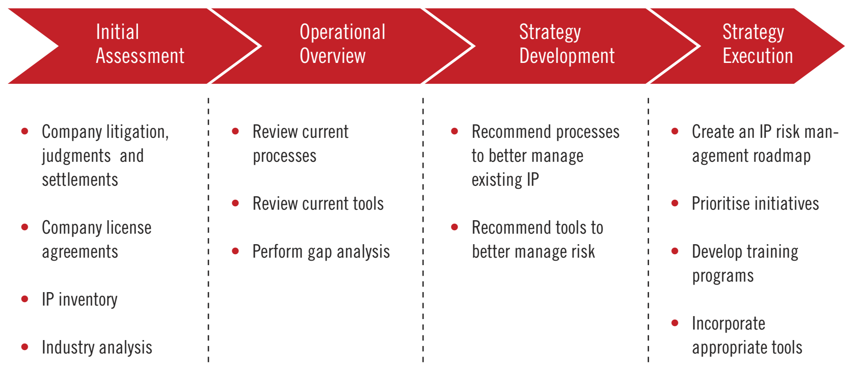
IP risk management framework

How are companies supposed to manage, or even identify, potential IP risks? A company should establish a framework to manage the risks associated with IP. Such a framework often starts with an initial assessment phase that may include an IP inventory to identify what assets the company must manage, competitive IP analysis to understand competitors' products and IP positions, and a litigation assessment to understand trends and litigation history. This initial assessment is the first step in the IP risk management framework, which is illustrated in the graphic below. The initial assessment is then followed by an operational overview phase to understand the processes and tools the company has in place to manage IP risk. The third phase consists of strategy development, including a gap analysis, in order to create a roadmap from the status quo to implementation of leading practices in IP risk management.

IP risk management process

There are numerous tools that companies can use throughout the IP risk management process (*see Figure 1*): IP asset databases, customisable contract management ▸▸

Figure 1 – IP Risk Management Process



databases, IP analytics tools, valuation templates, and litigation risk analysis templates, to name a few. One area where these tools can be quite useful is IP litigation. Early in the litigation process, companies should identify, quantify, and manage their risk. In some instances, litigation risk analysis helps defendants settle cases before incurring substantial legal fees. In other instances, litigation risk analysis helps plaintiffs identify situations where substantial litigation costs are warranted due to the potential for significant damages awards.

Another area where these tools are effective is licensing. In developing licensing strategies, companies can use flexible licensing models that measure the estimated benefits of their IP to potential licensees, assisting in the development of a comprehensive strategy for extracting maximum value. These tools can also be used to prioritise licensing targets, understand potential license structures, and prioritise licensing activities. Additionally, these tools may also be used to conduct sensitivity and scenario analyses based on varied assumptions regarding possible strategic outcomes and royalty structures.

IP risk matrix

IP risks can be segregated into threats and opportunities and then further segregated into threats and opportunities associated with Company IP (IP owned by the company) and with Non-Company IP, as indicated in *Figure 2*.

To elaborate on an example from the IP Risk Matrix, the following describes vendor litigation and injunction risk. In November 2001, NTP Inc. (NTP) filed a patent infringement suit against Research in Motion Inc. (RIM), claiming that use of RIM's BlackBerry wireless communication devices infringed NTP's patents. The lawsuit threatened to shut down BlackBerry service to millions of users in the US by obtaining an injunction from the court. As a result, companies that relied on BlackBerry service to run their businesses faced the risk of business interruption had an injunction been enforced. Ultimately, RIM settled the case for $612.5m, avoiding a shutdown of its service.

IP risk case study – Cytomedix

A company's view of IP risk should not be limited to potential threats to its business, but it should also include potential opportunities. For example, IP-savvy companies sued for patent infringement often cull their own portfolios in order to identify patents that might provide the basis for a countersuit. Companies with well-managed IP portfolios often look for opportunities to license their technology in non-competitive markets. For some companies, recognising IP opportunities can be the difference between success and failure. The following is a discussion of one such company, Cytomedix, Inc. (Cytomedix), who emerged from bankruptcy to follow an IP licensing strategy to success.

Cytomedix is a biotechnology company specialising in the research, development, licensing, and distribution of systems for autologous cellular therapies. Autologous cellular therapies use patients' own body products. One of Cytomedix's products is called AutoloGel, which is created though Cytomedix's patented process whereby a patient's platelet-rich plasma is separated from whole blood, activated into a gel, and applied to chronic, non-healing wounds.

Originally, Cytomedix attempted to develop and market this technology on its own. Due, at least in part, to the collapse of funding for biotech ventures generally in 2000, Cytomedix was unable to fund its development and marketing efforts and filed for bankruptcy in August of 2001. Upon emerging from bankruptcy, Cytomedix's new management team recognised the value of the company's IP, especially outside of Cytomedix's core 'chronic wound care' markets. The management team viewed licensing efforts in non-core markets as a source of capital for development and marketing efforts in Cytomedix's core markets. Specifically, Cytomedix began a licensing initiative focused on licensing its patented technology non-exclusively to numerous companies in the non-core markets, while trying to reserve for itself and its AutoloGel formulation the core 'chronic wound care' markets.

To date, Cytomedix has announced patent licenses with several major medical device manufacturers, including Biomet, DePuy Spine, Medtronic, Cobe, and Harvest Technologies. These licenses have generated several million dollars in upfront royalties, and continue to provide royalty streams to Cytomedix based on future product sales of certain licensees. These license deals not only provided capital to the company, but also validated Cytomedix's IP in the marketplace and among other potential licensees.

Figure 2 – IP Risk Matrix

	Company IP	Non-Company IP
Threat	• Loss of competitive advantages from third parties using your IP • Licensees not making royalty payments as called for in licence agreements • Failure to adequately protect inventions, brands, etc.	• Direct litigation and injunction risk • Vendor litigation and injunction risk • Technological innovation risk
Opportunity	• Identification of licensing opportunities • Identification of litigation opportunities • Cross-utilisation of IP among business units	• Gain access to IP to be used in your products • Gain access to IP to be used to block competing products • Gain an understanding of competitors' develop ment priorities

Conclusion

IP may be the most valuable class of asset a company owns. Accordingly, companies need to: (i) inventory their IP assets and concurrently assess their IP risk; (ii) identify gaps in their current management of IP; and (iii) develop processes and tools to enable a more proactive management of IP risk. Such a process will enable companies to not only better manage IP-related threats, but also to exploit IP-related opportunities, resulting in increases to shareholder value. ■

Bjorn Pettersen is a vice president, Jeff Snell is a principal and Brian Frizzell is an associate principal, at CRA International.